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FEBRUARY 1987 No. 58 £1

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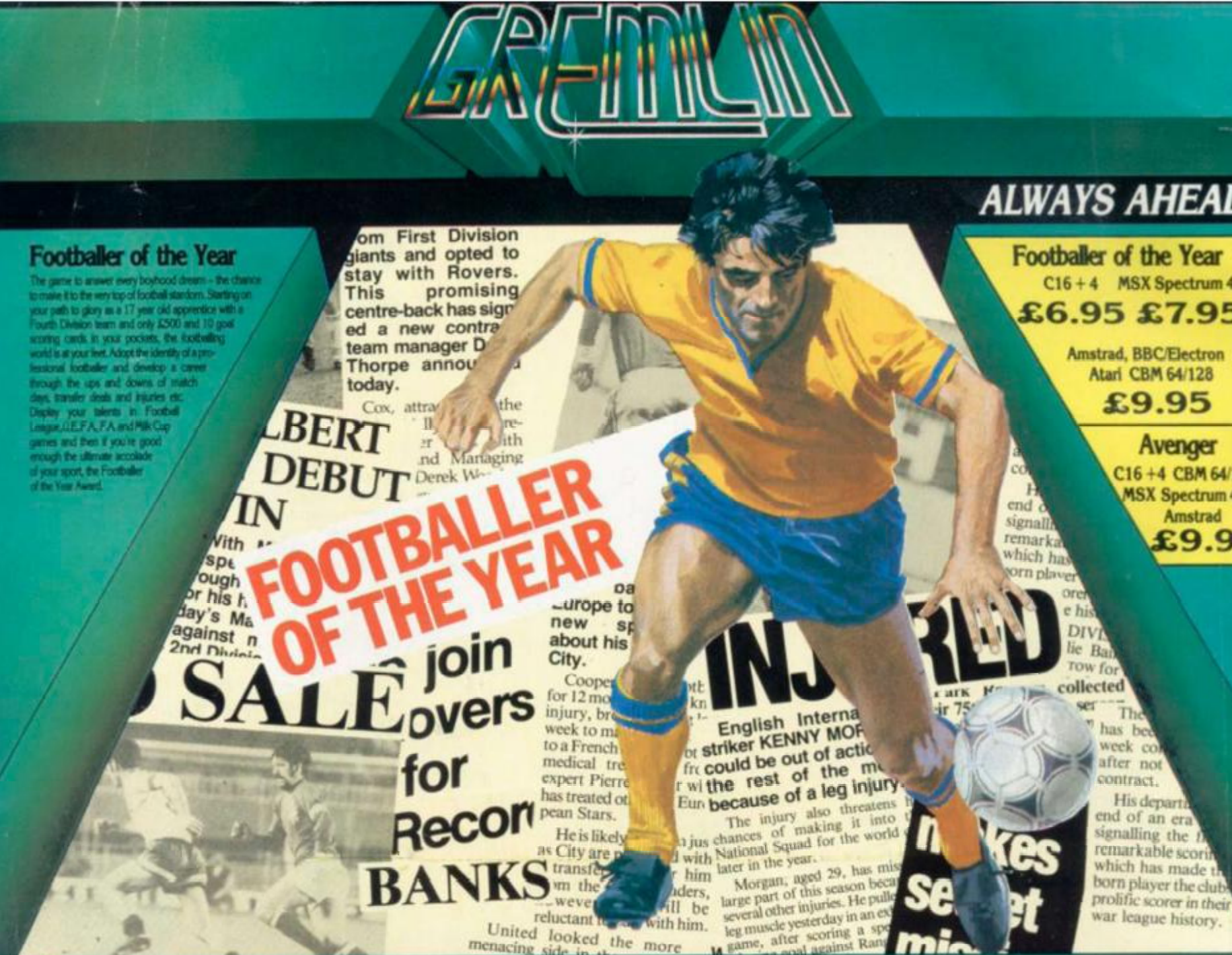
FOOTBALLER OF THE YEAR
om First Division giants and opted to stay with Rovers. This promising centre-back has sign ed a new contra team manager D Thorpe annou today.
LBERT DEBUT IN
SALE
join overs for Recor
BANKS
Europe to new sp about his City.
INJ
English Interna striker KENNY MOR could be out of actio the rest of the m because of a leg injury
The injury also threatens h chances of making it into t National Squad for the world later in the year.
Morgan, aged 29, has mis large part of this season beca several other injuries. He pull leg muscle yesterday in an ex game, after scoring a spe goal against Ran
RLD
collected
has be week co after not contract.
His departu end of an era signalling the r remarkable scorin which has made th born player the club prolific scorer in their war league history.

Footballer of the Year

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Avenger

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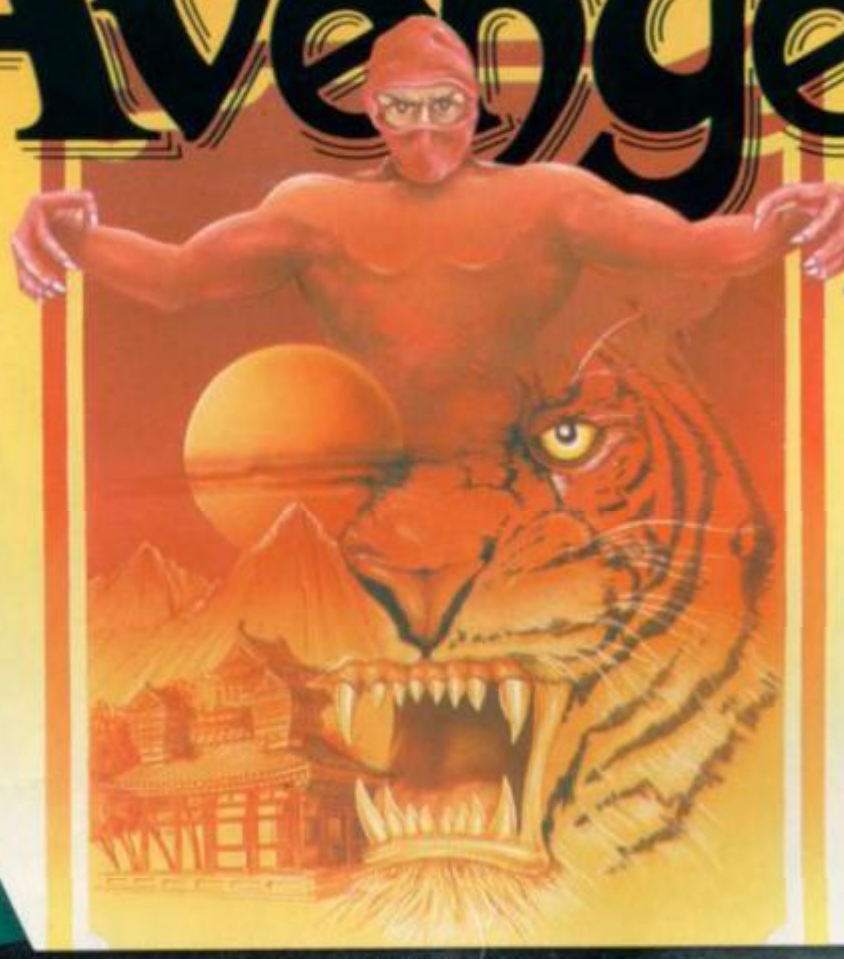
Avenger



First came "The Way of the Tiger" the martial arts classic in which you had to prove your physical skills to become a Ninja. Now you have to prove your supreme mental agility in the second part of the Way of the Tiger saga "Avenger", the ultimate arcade adventure. Yaemon the Grand Master of Flame has assassinated your foster father Naijishi and stolen the Scrolls of Kwtsuin. You have sworn to the God Kwon that you will avenge Yaemon's murderous act and recover the sacred scrolls. Your enemies are many, varied and all are deadly. All your skills courage and nerve will be called upon when you begin the final conflict in the Great Keep. Good Luck... only the brave hearted will survive.

Avenger (Way of the Tiger II)

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GREMLIN

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Trailblazer

Available November

C · O · N · T

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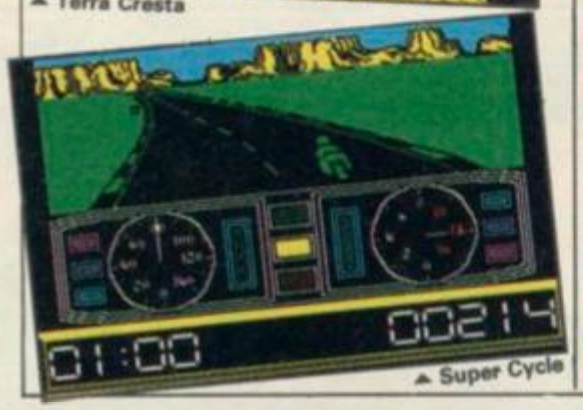
▲ Impossiball

▲ Golf

▲ Terra Cresta



▲ Super Cycle

SOFTWARE

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SCALECTRIC
MARBLE MADNESS CONSTRUCTION SET
GAUNTLET
IMPOSSABALL
TEMPEST
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STRATEGY/SIMULATION

HANDBALL MARADONA
SUPER SOCCER
FOOTBALLER OF THE YEAR
HACKER II
SUPER CYCLE
GOLF
GALLIPOLI
YOUNG PLAYERS' TRIVIAL PURSUIT
ACROJET
DEEP STRIKE
SWORD AND SHIELD
EXPLORER

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128K ART STUDIO

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SAS: OPERATION THUNDERFLASH
STORMBRINGER
HARVEY HEADBANGER

COMPILATIONS

5 STAR GAMES
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UNBELIEVABLE ULTIMATE II

ADVENTURE

SILICON DREAMS
DODGY GEEZERS
KAYLETH
WINTER WONDERLAND
KWAH!
DOOMSDAY PAPERS

NEW OWNERS START HERE!

Mega indispensable pull-out intro guide to using the 128K+2 55

With most of the things the manual explained very badly explained very brilliantly, some really simple programs to type in plus an easy-to-follow guide to software

COIN-OP

Inside the Arcades 92

From the land of a thousand LED's SU takes apart the coin-ops. We check out the new gimmick that will keep you going back – hydraulics. The games tipped for the top in '87. And the low-down on all the big games tipped soon for a small screen appearance

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About the future of software but no-one else could tell you. Including Shadow Skimmer, Mercenary, Feud, Ranarama and more . . .

▲ Feud

▲ Shadowskimmer

COVER SMASH

Hive 24

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SU puts the boot in (but strictly only where absolutely necessary)

New Year predictions 72
SU put up its phone bill considerably by getting on the blower to the head honchos of the software world asking them what 1987 will bring

SAVE OVER £10!

Smash offer coupons...
Cut out and send off the eight special SU Smash Offer coupons in the pages of this mag and you could save £15 on the latest releases! Money off Gauntlet, Impossaball, Super Cycle, Top Gun, Hive and more . . .

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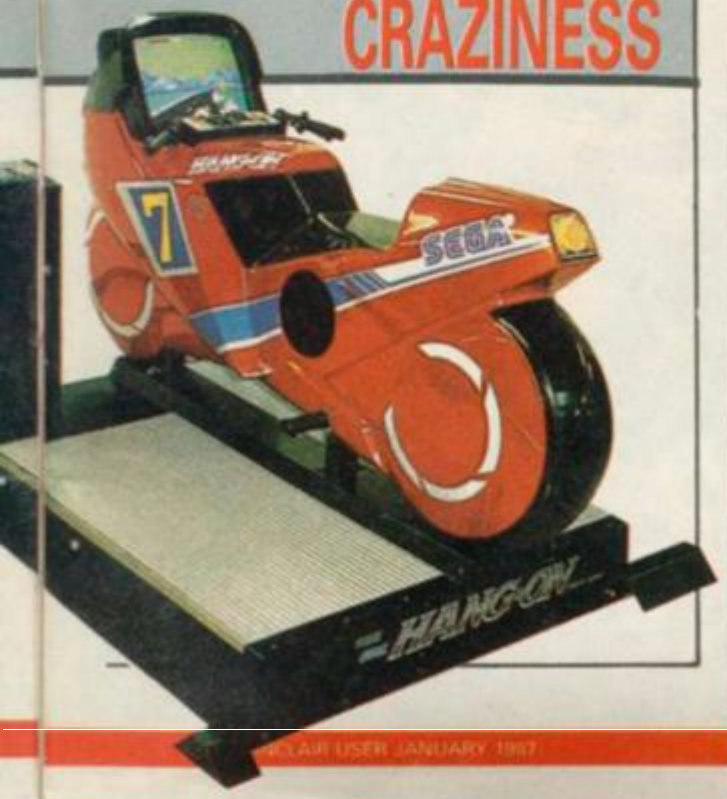
CRAZINESS



COMPETITION

The complete Magic Knight 45
Now Stormbringer's been released by Mastertronic SU's got rather a lot of complete sets of Magic Knight games to win – that's the whole trilogy with Spellbound and Knight Tyme as well!

SPECIAL OFFER

Microdrive cartridges 43
Yes! SU has negotiated some pretty nifty deals on Microdrive cartridges – either in tens or twenties – and either way you get them in a really neat flip-top storage case

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...the name of the game

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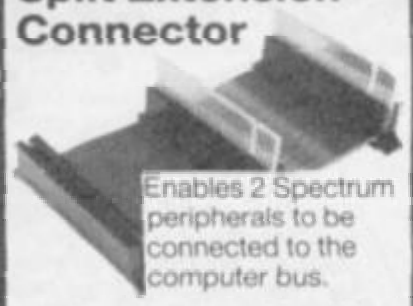

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Dandy
Electric Dreams

You were absoutely right about Dandy! **It's brill and well worth £7.99 asking price!**

The object of the game is to either go solo or with a friend and hack, thump, and zap your way through spectres, necromancers and other dungeon dwellers guarding a massive treasure hoard, which if you are fast, you can stuff into your swag bag.

The graphics are detailed really well and your character moves quite fast. There are lightning flashes, and spells with which you can kill off all the monsters in one screen.

The game is viewed from above and two people can play at the same time. One criticism of the game is the names of the people you control. Thor is alright, but Sheba!

The area is not a scrolling type but a flip screen. Brilliant■

Saleem Ahmad
Yardley,
Birmingham
Game Choice:
Eastenders **or**
Star Games

Alpha-Omega
CRL

Well you can strike me down with a kangaroo chop! A pure arcade game has just been loaded into my computer and it's a long time since I saw such a simple one.

You play what looks like a kangaroo, and the object of the game is to progress through the forty levels in the game defending yourself against the forty different monsters in the game. You possess the technology to jump and even fire (a kangaroo with

a phaser? Strewth!) and with all your skills from Kosmic Kanga, should progress far.

The simplicity of the game makes it enjoyable to play. Alpha Omega has taken **Joust** and put it on to the Spectrum. Very enjoyable game and the right price.

Yet you gave it one star. How could you do that?■

Danny Marcus
London N10
Game choice:
Thanatos

Trap Door
Piranha

Trap door is a good copy from the TV series. The graphics are detailed large and colourful. The bloke who wrote this game also wrote Popeye, Minder **and** Benny Hill, **although** Benny Hill **wasn't much cop. But he made up for this by writing the other game. With such good quality in the game you have to perform tasks in order to complete it. It is good value for money and great laugh. You should buy it**■

Phil Dunne
Dave Clarke
London N6
Game Choice:
Scooby Doo

Ghosts and
Goblins
Elite

After reading the review of **Ghosts 'n' Goblins** in the July issue I rushed out to buy a copy.

Ever since that fateful day, I've been a n-nervous wreck. Elite has never showed mercy on square-eyed addicts like me and I don't think they intend to start.

The game is easy, up to the point where the Gremlin is sitting. But if you don't kill him before he attacks, you've had it! The semi-intelligent thing either picks you up and drops

you, or fires heat-seeking droppings at you. Either way you start again. I've only ever managed to get on to Level 3.

The only thing that lets the program down is the poor colour and graphics. The bigger monsters are quite detailed, though. **GNG** does not have many colours, and the colours it does have, are naff!

M Tidy
Maidstone,
Kent
Game Choice:
Gauntlet

Avenger
Gremlin

Gremlin has been very clever and made a kind of **Gauntlet** but with everybody's favourite, karate, mixed in with it. It follows on from **Tiger** putting the use of your skills into an assignment. The graphics are excellent and scrolling is good too.

I believe there is going to be another **Tiger** in the series. If there is, I hope it will be as good as the other two, then they will be the best three games for a while that have been released.

Anyway, getting back to **Avenger**, the three hundred screens make it more exciting because you don't get bored with the same screens all the while. Also, the objects you collect move around each time. I think that about sums it up. It's a great game. You were right – it's a Classic■

Scott Blackwell
Wellingborough,
Northants
Game Choice:
Breakthru **or** Jail
Break

Street Hawk
Ocean

After a highly detailed loading screen, the game finally loaded and on to the screen appeared a title page with different options.

You chase up a crowded motorway after a bunch of villains that constantly shoot at you. The graphics are good and the scrolling is smooth. The next stage involves shooting robbers as they appear out of Joe's Cafe. Then it's on to the next chasing stage.

Overall, a smart, nicely presented game, but does get boring after a while. Not as good as it should have been after a two year run up. You were right■

Phil Palmer
Crediton, Devon
Game Choice:
Robin of the
Wood

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write stuff...

Frost Byte
Mikro-Gen Software

Frost Byte is a game where you have to free captives, but before doing so you encounter creatures and objects some of which can be zapped and many that cannot be zapped.

You pick things up as you go through the screen and it is advisable to zap the object creatures as soon as you see them. The game is hard and takes time, patience, and quite a lot of skill to complete. Not a game for beginners in my opinion.

The graphics are very good and the worm-type animal that you control is very cute.

Frost Byte is one of the

more expensive games, but it didn't really hold my interest for long.

And you gave it four stars, too.

I don't really think that I would spend my money on it again■

James Tebbs Ware, Hertfordshire
Game Choice:
Sacred Armour of Antiriad

Spy Hunter
US Gold

I think that Spy Hunter **is good because it has good graphics and is based on a good idea. It's**

also quick and interesting. My brother and I play it a lot.

I think you were wrong to slag it■

Paul Thorp Ashburton, Devon
Game Choice:
Terra Cresta

Space Harrier
Elite

If you've seen Space Harrier **in the arcades, you'll know that this is one of the most complex games ever made. This was a game that people said couldn't be converted but Elite has done a brilliant job on it.**

The idea of the game is basically to destroy everything in sight without getting killed. All the graphics get gradually larger and larger, and the effect is unbelievable. This game is absolutely brilliant although it suffers from attribute problems (but that is the bloody Spectrum for you)!

And I didn't think it was anywhere near as easy as you did!■

Ian, Dan, Raj, Simon and Dan, Essex
Game Choice:
Ikari Warriors

Cobra
Ocean

Why didn't you like **Cobra** ? It's ultra, mega radical and a great game. It's just right – mindless violence and innocent slaughter – I even shot Ingrid, his girlfriend, to prove how ruthless I am.

Why Ingrid hung around is beyond me, as she was shot, stabbed, and even head butted – I just love that move "Whallop".

This may seem strange, but I haven't got a computer so I play all my games at the lunch break during school on my pal's Spectrum.

So there it is, an "if it moves it dies sort of game" well worth buying■

Gordon "Death is my business, and business is good" Bingham
Game Choice:
Judge Dredd

Uridium
Hewson

This game is nowhere near as good as you said.

Scrolling is smooth and quite fast, and your Manta fighter moves very quickly across the screen. The one-colour screen does avoid attribute clashes, but makes things hard to spot.

But I found it quite difficult to play. I suppose, after a little while, it could be quite average■

Mark Turner Stevenage Hertfordshire
Game Choice:
Shockaway Rider

Dr What!
CRL

You were spot on about Dr What. **This game is such utter crud, it's unbearable! The instructions don't actually say anything about the object of the game, and what little they do say is totally irrelevant. The graphics are really poor and sound, well! After the excellent (well, I though so!),** Academy, **it is something of a surprise to see such complete garbage as this from the same company.**

Buy it at your own risk. (Try taking insurance out first, though). Oh dear...■

Mike "Skippy" Dunn, Ludlow
Game Choice:
Space Harrier

Dynamite Dan II
Mirrorsoft

Dynamite Dan II is brilliant! I found it very hard and irritating at times, but I enjoyed bombing around eight islands placing discs in juke boxes and collecting fuel for my ship.

Mirrorsoft has done a great job on this one and although it is irritating at times, it is very addictive. Surely this is one of the best platform and ladders games around.

After a week of continual play, I reached the sixth island and eventually after I had smashed my joystick to pieces I reached the final island.

My only comment on the game is at the end of the final island when you have to place a bomb in his lab. The problem is I can't find it!

Still I think it's a great game■

Martin Affley Cardiff, Wales
Game Choice:
T T Racer

Every so often — well very often actually — you write to tell us that we know nothing about anything and insist that some program we trashed is actually the best game ever. Conversely you blast us for saying something is great that you absolutely loath and detest.

Enough is enough. We can't take any more, if you think you're so clever you write the damn magazine. We mean it!

Every month we'll devote a page to a selection of your opinons on the latest software. Don't get mad write the review you think the game should have received and we (subject only to space) will print it.

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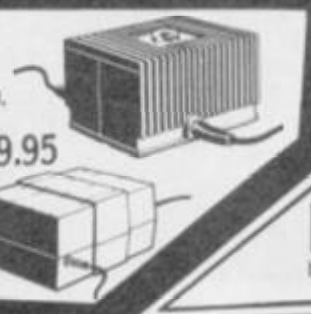

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JON RIGLAR'S ZAP CHAT

NOW the festive season has ended and the majority of the staff have got over their seemingly permanent hang-overs, it's about time we all got back to some serious hacking and zapping instead of hiding in corners and pretending that we were all in Brazil.

This method has proved fruitful for the last few weeks and has allowed the team to consume numerous cans of Old Pete's Bitter. However, when a dead-line arrives on your doorstep, there is nothing you very well can do to avoid emerging and doing a bit of work. (Even if the dead-line was two weeks ago.) This month, there are numerous delights from the bowels of the Sinclair world to make you jump around with glee, including a special edition of Uridium tips.

HOWEVER, to kick off, here are some juicy tips for Faster Than Light's shoot 'em up

Lightforce.

It just so happens that included somewhere in this column are the results of the incredible *Zapchat* Challenge set on **Lightforce** last month, and because this all ties in very neatly, I reckon we deserve a pay rise. The following tips were sent in by Matthew turner who comes from the middle of Cheshire. First, let's look at the different types of alien that you are likely to encounter:

- Green Flying Saucers: Zig-zag downwards and cannot be shot
- Red Flying Saucers: These circle round you. Some fire rockets, others drop mines and all head straight at you
- Blue Flying do-das: These follow a set course and are easy to kill
- Yellow plop plops: They follow same course as blue saucers but suddenly turn and fly at you
- Green Asteroids: Come down level with you, cannot be shot and get in the way when you are going for a group bonus.
- White Asteroids: Track you down and therefore need to be shot as soon as possible
- Zeroids: So called because they look like, well, Zeroids (?) These come up behind you (aha!) and then head straight at you
- Enemy fighters: Some come from the side in a long line, others attack from the side of the screen

Now, for all facts and order buffs out there, here is the order of the events on the game:

Asteroid Belt: Green asteroids, building complex, yellow asteroids, 3 lines of blue flying saucers, yellow asteroid, building complex, white asteroid, red flying saucers (2 waves), building complex, yellow asteroids, and finally then the white asteroids

Jungle Planet: Zeroids, green flying saucers, building complex, enemy fighters, enemy fighters again, enemy fighters again (yawn), the runway, building complex, crosses, bonus life, green flying saucers, enemy fighters, building complex, crosses, enemy fighters, bonus life, green flying saucers, zeroids and green asteroids to end the section

Orbital Platforms: Green asteroids, red flying saucers, yellow asteroids, white asteroids, bonus life, zeroids, red flying saucers, red flying saucers, red flying saucers, red flying saucers, green asteroids, red flying saucers, yellow asteroids, green asteroids, red flying saucers, zeroids, red you know what, rocket firing red saucers, red flying saucers, yellow asteroids, red, red zeroids, green asteroids, bonus life

Ice Planet: Whilst a few types may look slightly different, all the aliens behave exactly as they do in the Jungle Planet. Ha! So there! Ya boo to you too!

To finish off his letter, Matthew added these few words of utter wisdom.

"The reason for these notes is that the problem with **Lightforce** is not knowing what comes next. Should you go to the middle, stay at the top, slide down the side, or jump on the elephant?" Yes, well, don't call us, we probably won't call you.

Anyway, enough of this trivia nonsense as I'm sure you'll want to see the unique *Zapchat* Challenge Top Eight Chart to check for your name. So, here it is:

POSITION	SCORE	NAME	REMARKS
1	1210950	M.Turner	Made it up.
2	1009560	S.England	Ha Ha.
3	905232	W. Batrick	Getting plausible.
4	765464	P.Maunder	Well now.
5	755765	T.Eaves	Storyteller.
6	657895	J.Bedaton	Smooth guy.
7	564756	J.Dustan	Shorty.
8	465746	E.Crooks	Um..obviously.
9	465723	J.Douglas	Arggh! A staffer!

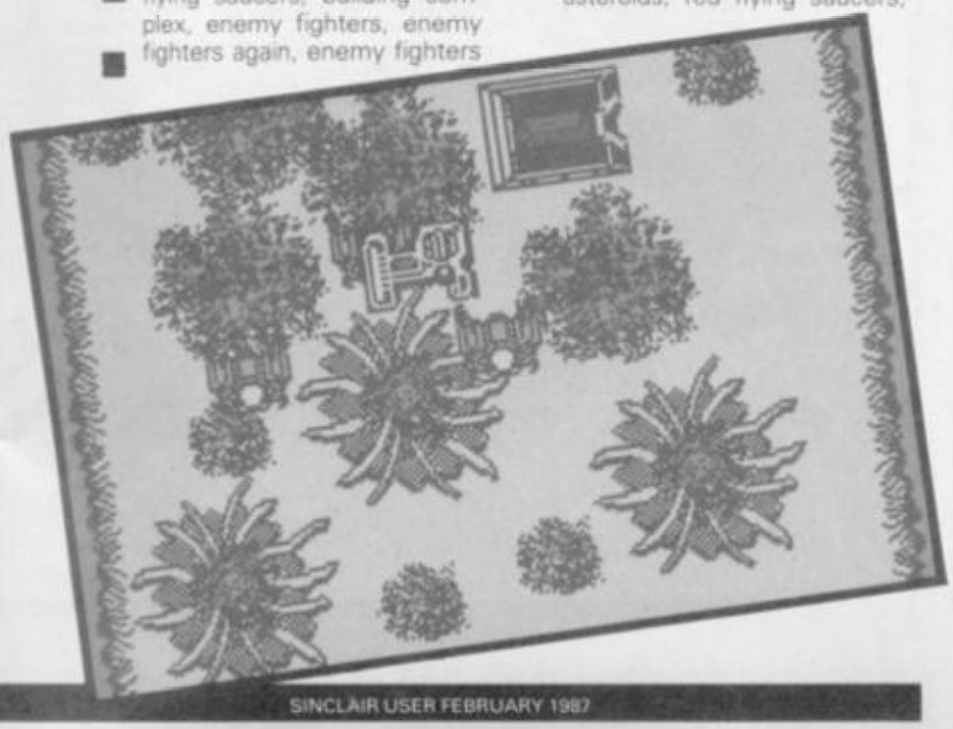
Thus ends another prestigious occassion and after a long debate, well, two minutes actually, we've verified that next month we'll cover **Uridium.** Some people should have completed it by then.

Another good game out now is

Thanatos

from Durell (Who just happened to make **Harrier Attack**, but that's another story). Simon Brown from Southsea in Hampshire sent these tips:

- In the caves with the nasty spiders, just fly in at full revs and flap up and down. This way, you'll hardly get bitten at all and will look extremely silly
- If the Princess falls off when you are in the caves before mentioned, the dragon must be quick to pick her up off the ground otherwise the spiders will nibble her
- When you want to kill a witch land near her and take off straight away. This way, you will hear the noise of hooves and a knight on his horse will appear. Match his speed and pick up the poor



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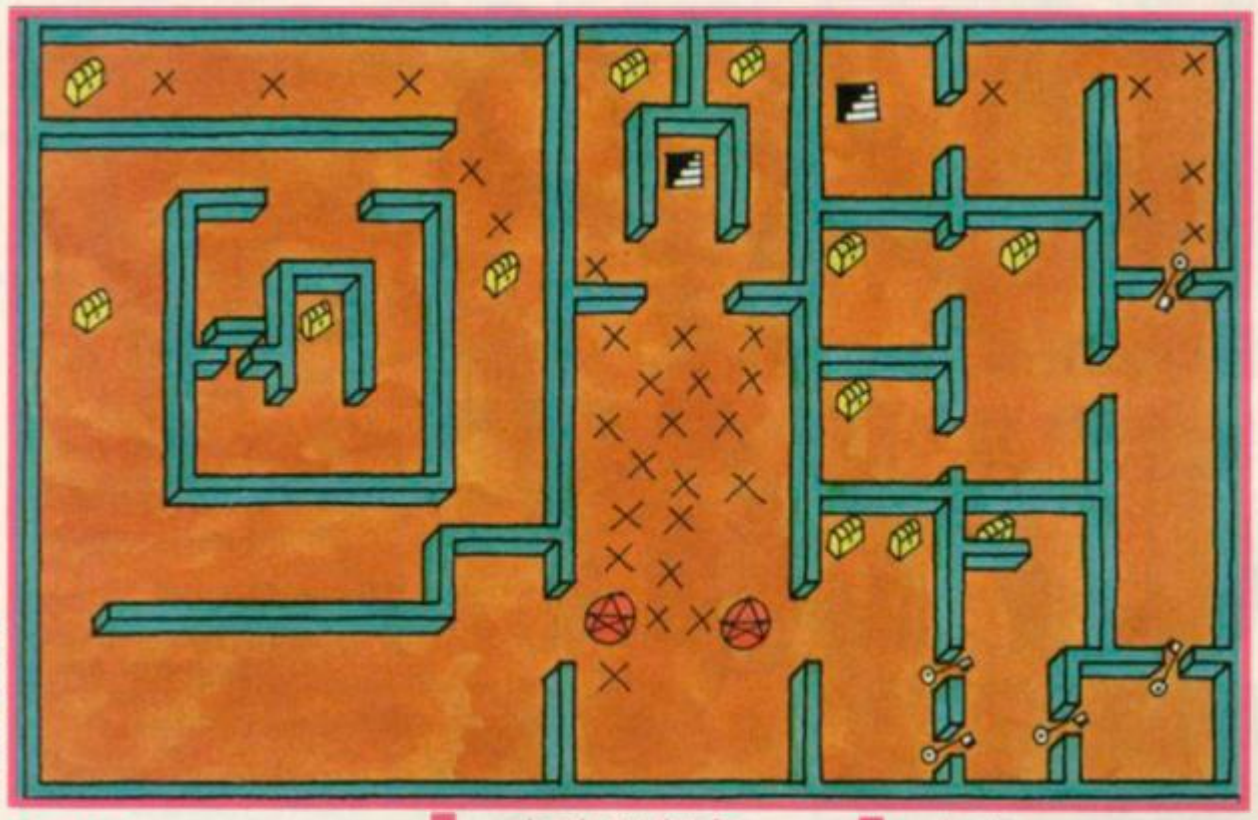
MAP CHAT



Druid: Level 3

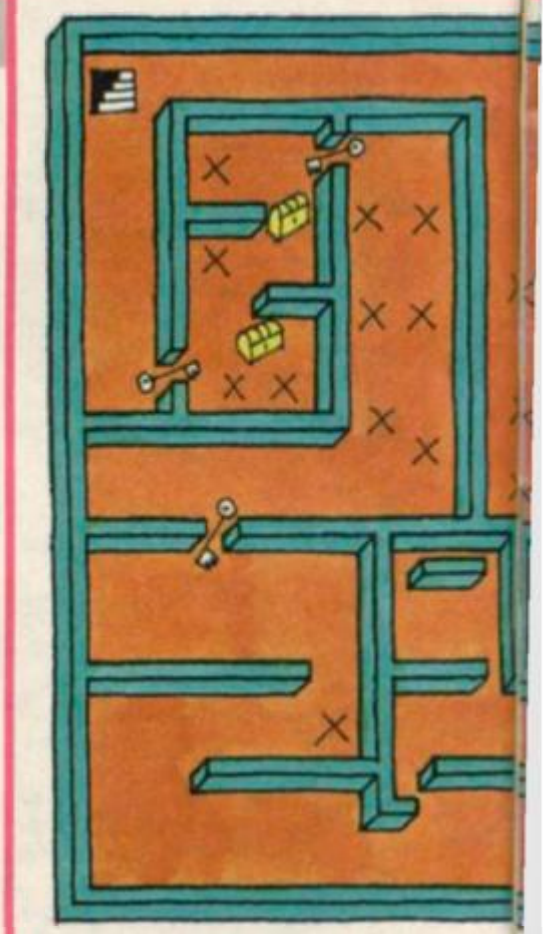
Druid

▲ is causing its fair share of problems and Stephen Carter from South Wirral has sent some maps – that are actually right, unlike some other mags – and a heap of tips. He's only mapped Levels 3 to 8 because the first two are really too easy to bother with and most everyone will have already got that far.

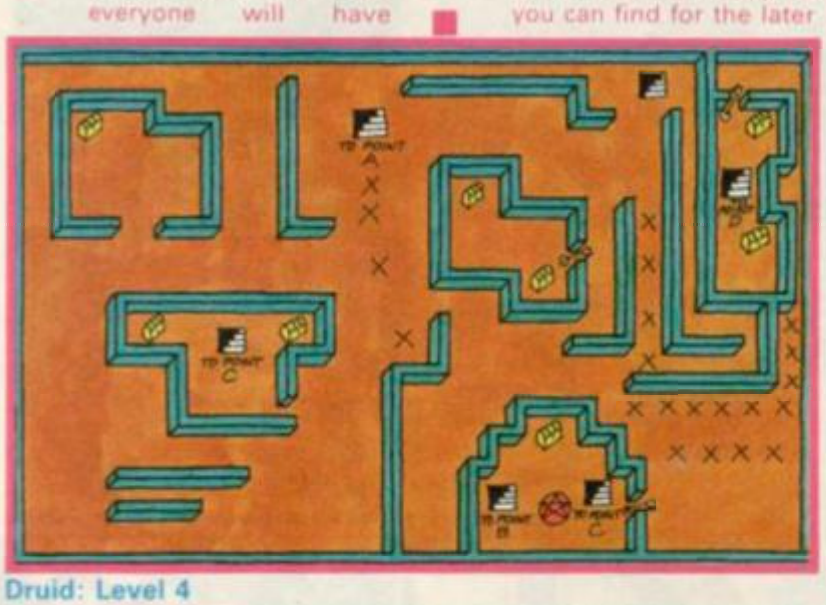
The object is to kill all the demon princes in the levels. There are four which are shown on the maps by skulls. They fire fireballs at you but you can sort them out, proper, by standing next to them and using the Chaos Spell. Another tip is to collect lots of keys – you'll need as many as you can find for the later levels.

The *fifteen different* classes of player you can become – depending on you expertise are (starting at the least experienced):

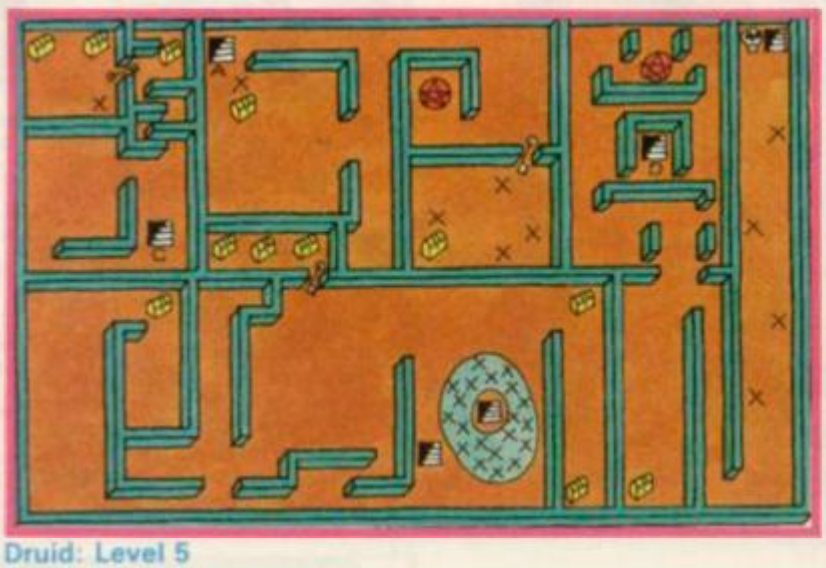
● Halfwit ● Apprentice ●



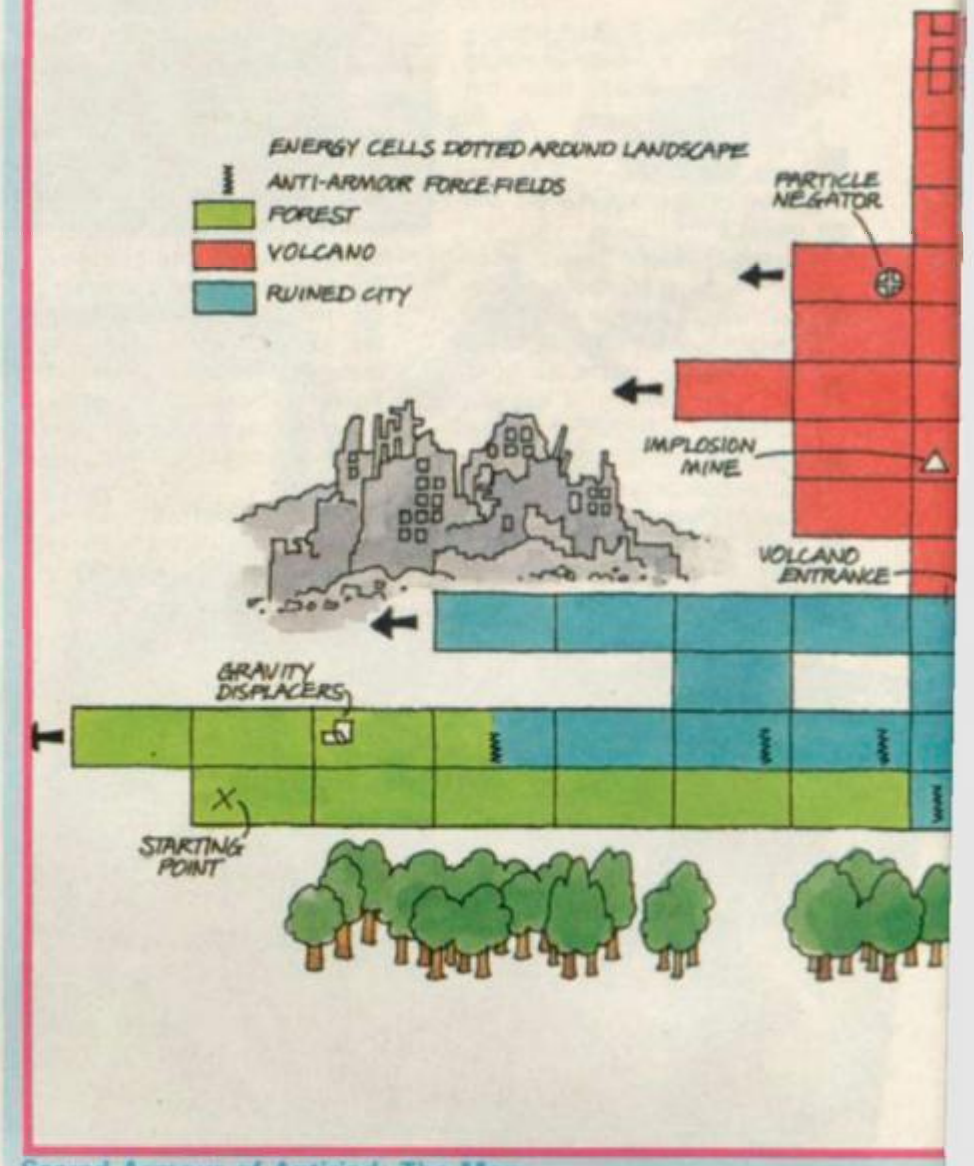
Druid: Level 6



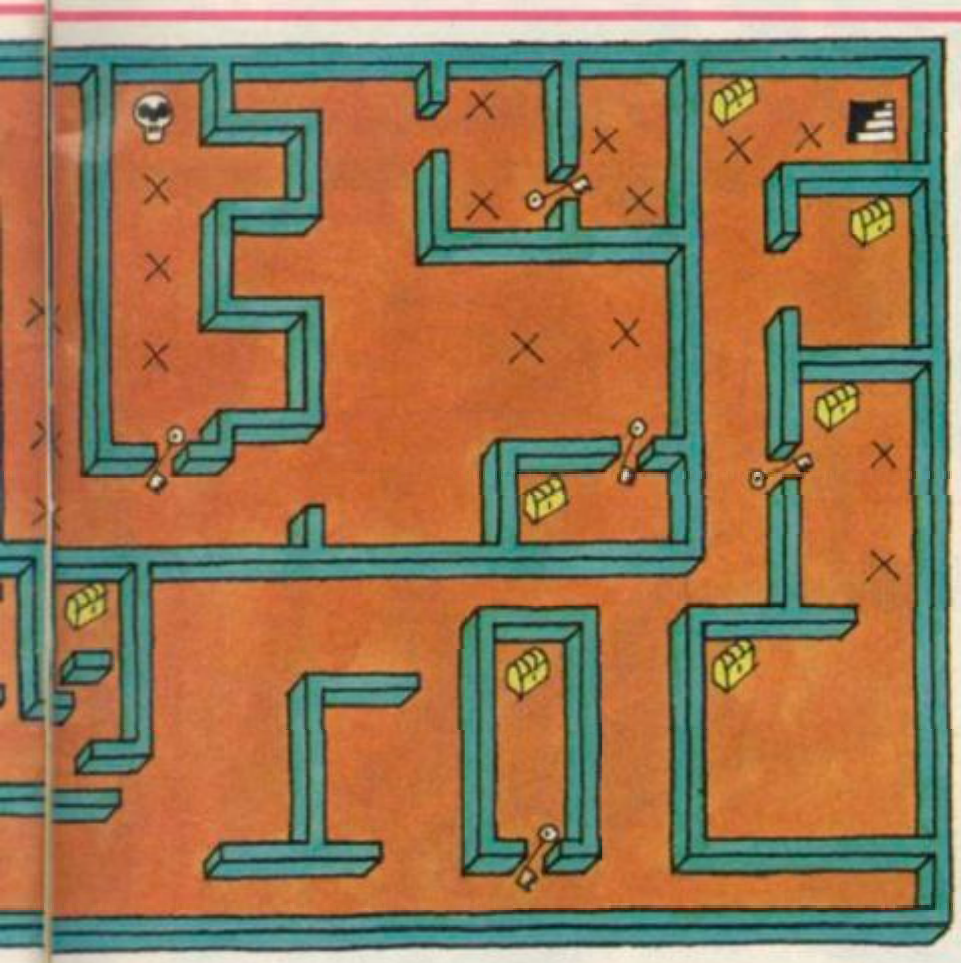
Druid: Level 4



Druid: Level 5

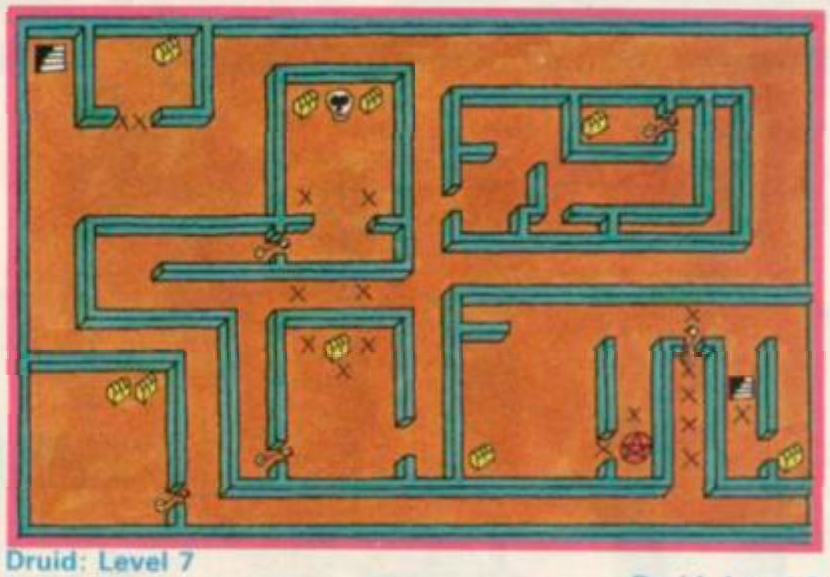


Sacred Armour of Antiriad: The Map



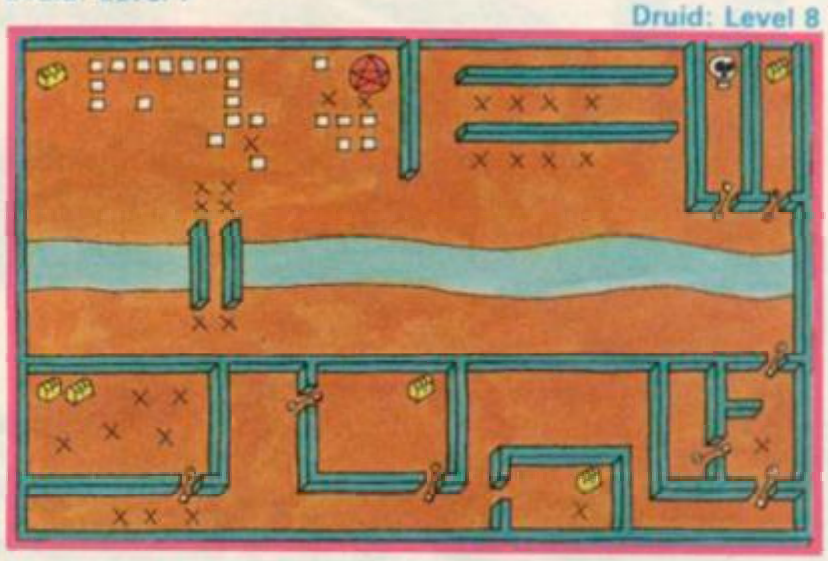
RGY PAD

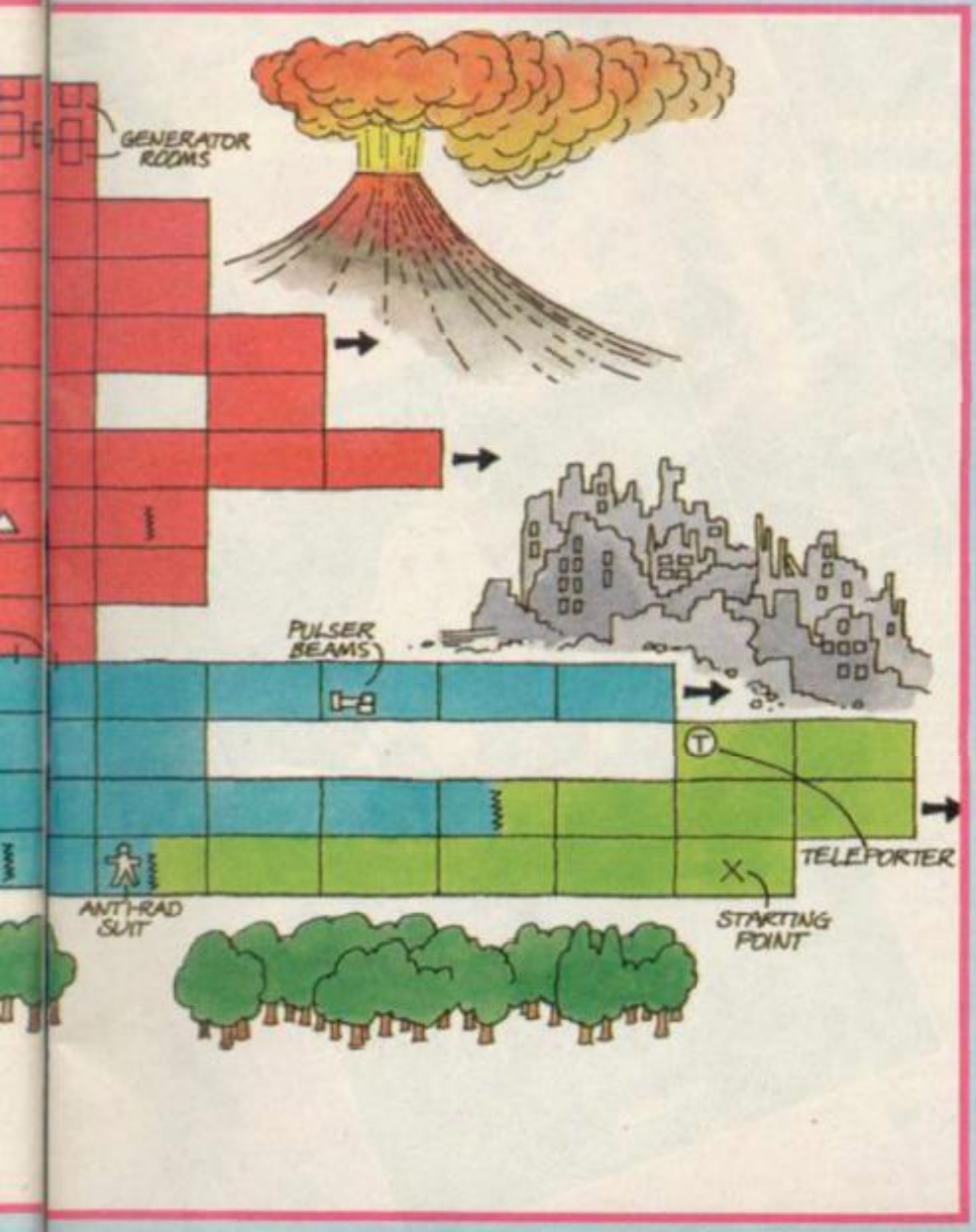
N AREAS



Druid: Level 7

Druid: Level 8





Seer ● Lore Seeker ● Spirit Master ● Cleric ● Potion Master ● Lore Master ● Priest ● Illusionist ● Magic Master ● ConJourer ● High Priest ● High Druid ● High Druid ● Light Master.

The correct spells to use for each type of creature you come across are shown in the Spell Guide in Table 1.

Table 1. Spell Guide

	Water	Fire	Electricity
Ghost	1	1	2
Bettle	3	1	2
Skeleton	1	3	2
Snake	3	1	2
Ralack	1	2	3
Wraith	3	2	2
Slime	3	1	2
Devil	3	3	1

Sacred Armour of Antiriad

is certainly one of the neatest and most complex plaforms-style games around and here's a useful map showing the key objectives in the game, a well as the overall plan. No matter which starting point the game kicks you off at, head for the anti-rad suit for starters. Until you get there use any rocks you find to ward off assailants. After the suit go for the gravity displacer boots and pulsar beams – cleverly placed at opposite ends of the lower forest and ruined city areas. Then go for the implosion mine and the particule negator, both inside the volcano. It's the implosion mine you need most to destroy the generator rooms at the very top

ocean

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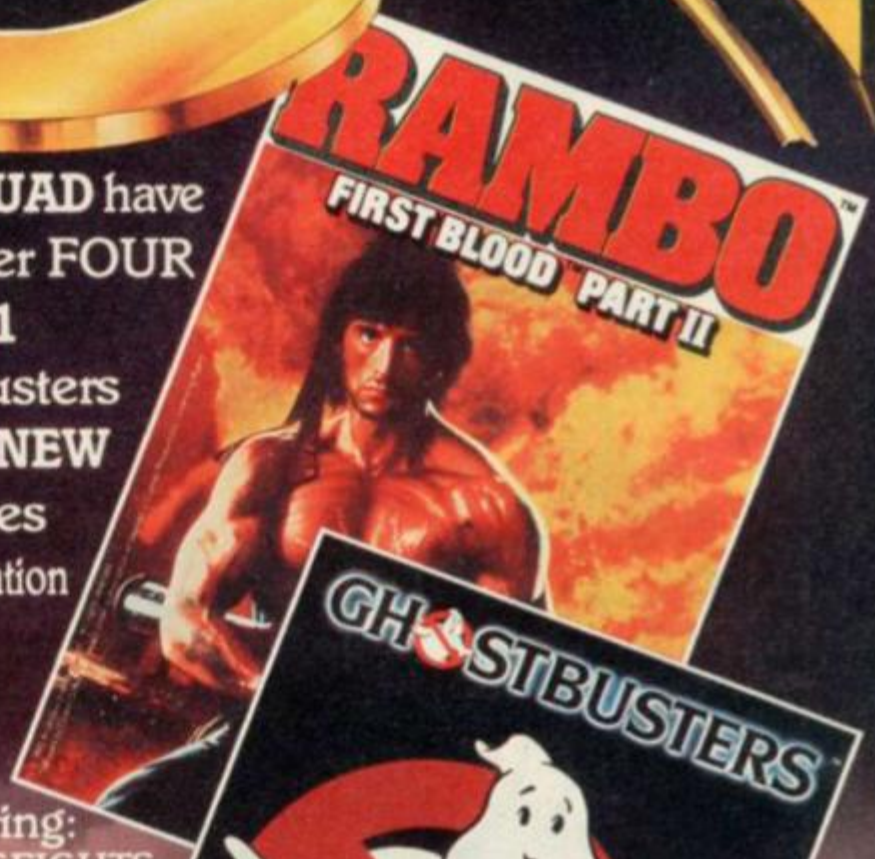

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The Hit SQUAD

fellow leaving his horse
● Whenever you find a safe spot, stop to rest
● When flying over the sea with the sea-serpents in it, fly at the very top of the screen and shoot your flame upwards. The flame will go out of the screen and into the sea, killing any passing sea-serpent
● To bonk off the two-headed dragon, you must shoot it under the wing with your flame
● When you get to the third castle, land and wobble to the gate. Some animals will come out, so take off immediately. Pick some animal up and drop it on to the others.
● You will never have enough flame to burn down the gate first time, you'll always have to go back through the caves to eat a few witches
● Well, now we all know. Burn a couple of witches here and destroy a few villages there.

Now, from the lowest, darkest corner of Priory Court, comes a bundle of tips that will shake the earth.

Uridium

▲ from Hewson has to be the ultimate shoot 'em up to be released this year, and to celebrate that fact, the team have doged and ducked to bring you the unique guide to playing the first four levels.

● **LEVEL ONE: ZINC.** It is best to approach this level at a fairly slow pace. Doing this will activate a wave of fairly slow enemy fighters attacking from the right. Simply fly in a straight line at a steady speed and shoot continuously. You'll destroy only one alien but will safely avoid the rest. When the wave clears you, turn round and blast them apart. This will give you extra points. Now to move on. You will notice that as you go further to the right, there are two aerial masts to avoid and a generator stuck in the middle. Whatever you do, do not fly directly over the generator as this will activate a mine which will fly in your direction. On the whole, this is a bad thing

You can avoid flying over the generator by watching your shadow carefully. By lining it up with the edge of the generator you can fly past safely provided you do not linger in the screen too long. Another method is to turn on your side and go to the very bottom of the screen and squeeze past the aerial. Tricky, but fun!

Once you have mastered either of these moves, then you can increase the speed of your manoeuvre until it amazes your friends. We found that flying on full speed past the bottom aerial and then moving down immediately after it and into line with the ground defence was the best tactic, but you need to practice it! Watch out, however – if you fly fast straight from the beginning the pattern of the meanies change and you could find enemy fighters creeping up on you from behind. If this happens, hang around to make sure that they don't fire, then flip around and head the opposite way. Part way through there's what can be a very dangerous passage. There is a sneaky way through though. Hang around at the top of this screen before you go through. This is because you can judge when a wave has gone past and when the next is likely to emerge. As soon as a wave has gone through, zoom through. Watch out for the aerial though! When you appear out the other end, climb up to the top of the screen as soon as possible. Hang around until the 'Land Now message' appears and when the next wave has gone by, go down with your guns blazing.

● **LEVEL TWO: LEAD.** I think you will agree with me when I say that this level is fairly easy going. One immediate tip though: for goodness sake go down at the beginning otherwise you'll end up a splattered on the wall that reminding people of a dead fly. You will have noticed that there are a group of ground targets here and all of these can be destroyed if you're quick. Once you pass the wall you will come across an aerial and you will need to yank your joystick to avoid it. A bit like a slalom course this – yank it up and crank it down as my gran once told me.

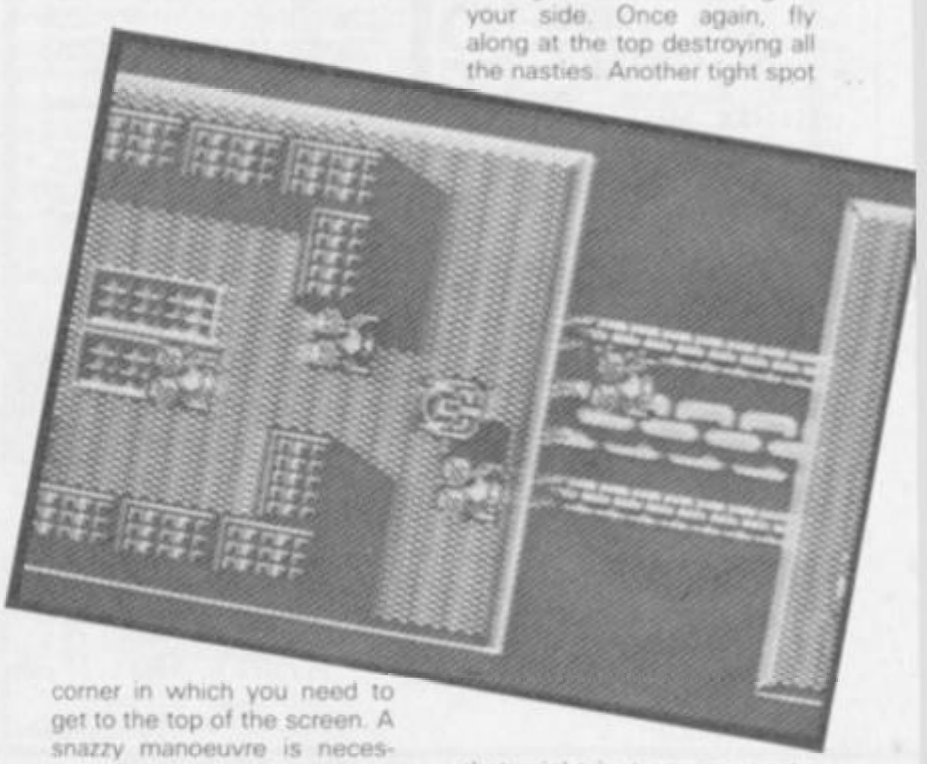
Once you are clear of the walls and numerous aerials, the level is easy. Provided you do not do anything incredibly stupid to disturb the aliens then they will follow a set pattern. The main difficulty encountered were the floating doughnuts as they were fondly called. these have a nasty habit of blazing into the screen following a set run and then stopping suddenly. If you are not careful, you'll wind up having lunch with them. They then settle down to float slowly to the right, letting rip with bullets that appear to keep up with you

Also, there is a nasty corner that could cause snapped fingers. Here, the best idea is to steer by the ship's shadow and this can roughly tell you when you are going to crash into something. Go slow and make sure that there is not a wave of aliens on its way.

Once you arrive at the landing strip, take things easy and avoid crashing into things. When the 'Land now' message appears, wait until a wave of fighters has gone by and then land quickly

● **LEVEL THREE: COPPER.** To start off, this level has an alarming array of walls which can catch out most of those Flash Gordon types who drive fast in their Manta XR3's. So go slow through the first set of obstacles. It is better to climb to the top of the screen and once past the second walls, fly diagonally down to the lower screen. Wait here until a wave of fighters goes by and then climb straight up to avoid the aerials. Speed up to get past the generator. Watch out for the oncoming wall, from which the only escape is a small channel right down at the bottom. This could be tricky as you will already be powering your way past the generator, but practice makes perfect

Even more fun is awaiting you – there is a sharp little



corner in which you need to get to the top of the screen. A snazzy manoeuvre is necessary. Pull back and up at the same time to make your Manta execute a tight roll and back flip. You should now be flying along a small channel at the top of the screen. Once you come to the end of the first part of the structure of the dreadnought, head straight for the bottom of the screen. Now comes another tricky bit – ahead of you is a very, very, very small gap for you to try to fly through. You will need to pull your ship onto it's side and pray. There is also a generator here that will let off a mine if you hang around here too long. If you have utter dificulties in the manoeuvre, then look up the inlay card and it will tell you exactly how to move the ship on to it's side. Once you get through the gap, then move on to the landing strip as quickly as you can. 'Hang loose' until the sacred signal appears to tell you to land. Park your craft immediately otherwise the aliens get nasty

● **LEVEL FOUR: SILVER.** Here's another easy level.

JON RIGLAR'S ZAP CHAT

Once you get past the first set of walls, then it is best to duck the craft down as quickly as you can waggle that joystick. Provided that you haven't already decorated the wall, you will now have to turn up and fly along the channel at the top. Go along at a fairly steady pace and make sure you avoid any aerials. You will need to pass through another tight spot, but you can just manage it without turning on your side. Once again, fly along at the top destroying all the nasties. Another tight spot that might just cause sweaty palms or other parts of the anatomy, is an array of lego bricks that form a diagonal wall. You have to approach the wall from the top and go slow. Make sure that there are no aliens about and then gradually bring the Manta down through a slight diagonal line. The landing pad is incredibly easy to locate and land on provided you time the approach carefully

Well, there you are. What more could you possibly want to do with **Uridium,** except a *Poke* and that's in the booklet. So, don't say we never help you out!

Before any of you start sending letters to the Ed (May his name be mentioned only in hushed tones) complaining that I'm a div or something else utterly ridiculous, here are some *Pokes* to keep you happy for a while. The first is from Adrian Singh and concerns Mastertronic's absolutely fabulous and what's more, incredible, release called

JON RIGLAR'S ZAP CHAT

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ZUB

▲ The author claims that this program and *Pokes* will destroy all the meanies and eventually make the game much more simple to complete. In fact, almost bearable, but I don't see it somehow

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10 BORDER 0: PAPER 0: INK 0
15 CLEAR 24699
20 LOAD "" SCREEN (string)
25 LOAD "" CODE: LOAD "" CODE
30 POKE 37473, 201
40 RANDOMIZE USR 24700
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If you encounter any problems then we are all in exile in deepest Peru which is becoming quite a popular place. Anyway, Adrian has also sent in some tips for the game and so here they are:

At the top of each planet there are 3 platforms, each of which leads to another planet though it is not obviously which one you'd always expect. You may end up going backwards, and even back to the starting planet. However, there is a very quick way to get through the game and it is shown below

PLANET 1 – take MIDDLE platform to get to PLANET 3
PLANET 3 – take RIGHT platform to get to PLANET 4
PLANET 4 – take LEFT platform to get to PLANET 6
PLANET 6 – take LEFT platform to get to PLANET 7
PLANET 7 – take MIDDLE platform to get to PLANET 9
PLANET 9 – take MIDDLE platform to get to PLANET 10

Once you manage to get as far as planet ten you will receive the greeny orb or zub which you have to get back home (yawn)

PLANET 10 – take any platform to get back to planet 9
PLANET 9 – take left platform to get back to planet 7
PLANET 7 – take right platform to get to planet 6
PLANET 6 – take middle platform to get back to planet 4
PLANET 4 – take right platform to get back to planet 3
PLANET 3 – take left platform to get back to planet 1.

Another budget game which Adrian has spent at least half an hour with is

Bombscare

▲ from Firebird. The *Pokes* printed below will make your droid invincible and thus should be helpful

POKE CORNER

Once again, these *Pokes* can only be used with a microdrive interface as mentioned before and it's no good trying to fiddle them into your header because they simply won't work!

Lightforce: infinite lives: POKE 40725,0

1942: inifinite lives: POKE 47007, 255

War: infinite lives: POKE 383,94,0
POKE 37033,0

Elite: destory menaces: POKE 46848, 201

Paperboy: Indestructable: POKE 48023, 201

Cyberun: Indestructable: POKE 36168, 175

Dan Dare: Lives: POKE 36168, 175
POKE 45954, 104

Spindizzy: Infinite time: POKE 48272, 201
POKE 48401, 201

Spellbound: Energy: POKE 55066,0
POKE 55070,0
POKE 55071,0
POKE 55072,0
POKE 27871,0
POKE 36133,0

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5 BORDER 0: PAPER 0: INK 7
10 CLEAR 27999
20 LOAD "" SCREEN (string)
30 LOAD "" CODE: LOAD "" CODE
40 POKE 56256, 0
45 POKE 23606, 46: POKE 23607, 181
50 RANDOMIZE USR 65000
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"When I got my November '86 issue of SU I opned the mag at my favourite section Zapchat (Creep!) and I was thrilled and utterly pleased to see the amount of *Pokes* printed. Another great point was devoting the *Poke* corner to people who on a suspicious basis, have a microdrive transfer interface."

Stephen follows on with around twenty five pages of professional grovelling and finishes with:

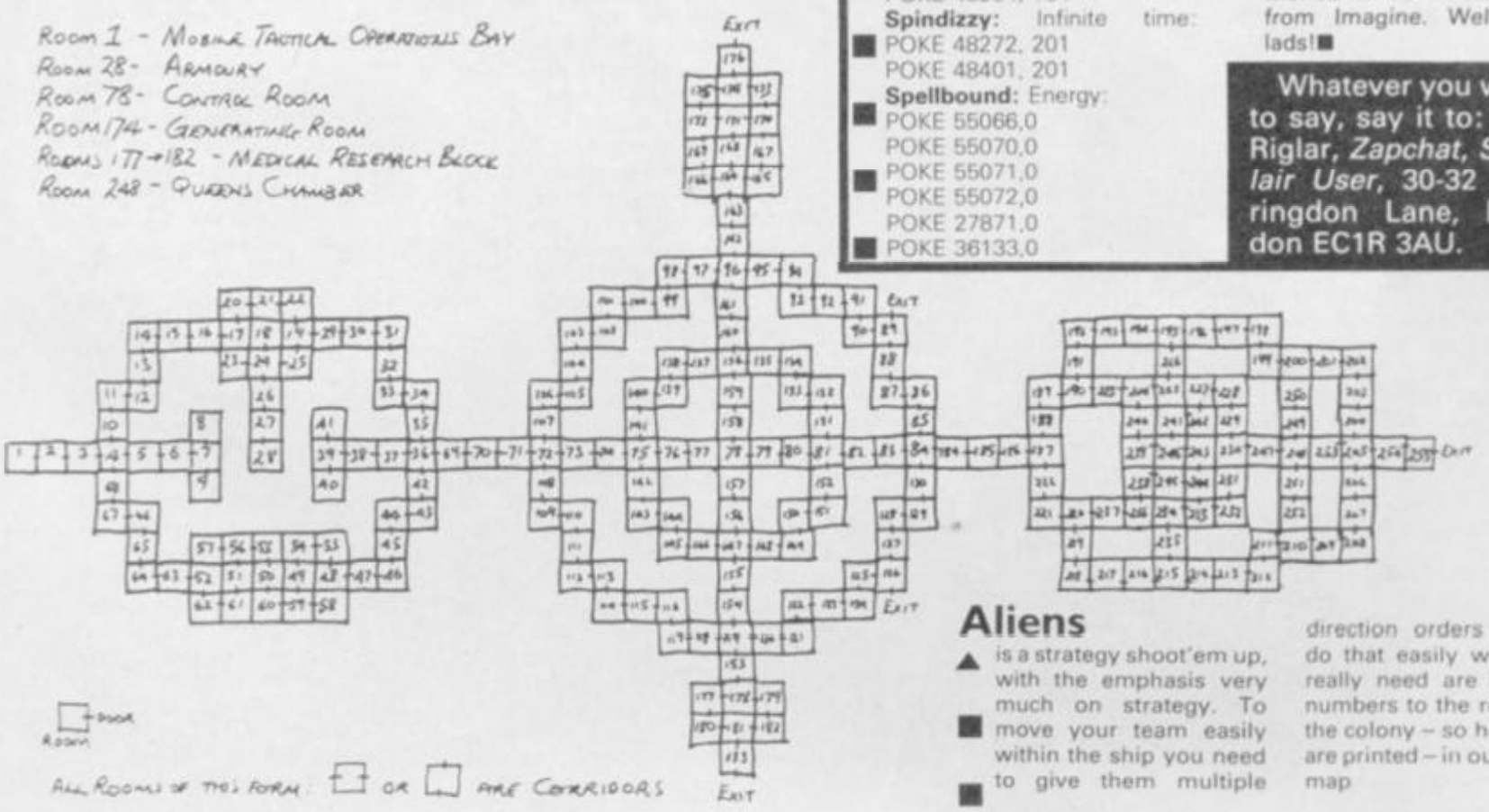
"Could you please, please devote another corner to such a type of cheat corner. If you do, I will go down on my knees and lick your shoes."

Well, how could I turn such a plea way away? The truth of the matter is that we've had sackfuls of such codes and so it was not too much trouble to stick one corner together. Pity though, after all that creeping I quite fancied making you hang on another month!

This month, maps have been sent in from here, there and almost everywhere.

Well that just about wraps the column up for this month. However, before I go away and hide in a corner for the next few weeks, I'd just like to congratulate *Crash* magazine, who in their review of **Cobra** raved and raved over the 'Outstanding sound which is the best thing heard on the Spectrum'. One thing they overlooked was that the tünes in **Cobra** are exactly the same as in **Ping-Pong** from Imagine. Well done lads!■

Whatever you want to say, say it to: Jon Riglar, *Zapchat*, *Sinclair User*, 30-32 Farringdon Lane, London EC1R 3AU.



Aliens

▲ is a strategy shoot'em up, with the emphasis very much on strategy. To move your team easily within the ship you need to give them multiple direction orders and to do that easily what you really need are the key numbers to the rooms in the colony – so here they are printed – in our Aliens map

A SPECIAL MESSAGE TO ALL THOSE PEOPLE WHO HAD A SINCLAIR COMPUTER FOR CHRISTMAS

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UNDER RAPS!

● *Greg Follis is preparing* ***Heavy on the Magik II*** *for summer release. It's likely to include two modules, The Trials of Therion and Tombs of Taro. Follis has changed the graphics layout of the game so that six rooms can be seen at any one time. You'll be able to load in pre-generated characters and there's talk of a two-player option*

● ***Max Spork (which can't be his real name) is producing*** *Chain Reaction* ***for Durell. It uses 3D filmation-style graphics but contains a unique programming logic. All the bullets in the game – and there are mega-millions – are individually mapped***

● *Denton Designs has* ***Mutants*** *on its mind. The game includes icon selection, space ships and mazes and will be launched by Ocean in late spring*

● ***Dominic Robinson and John Cummings are busy designing the follow-up to Hewson's*** *Uridium.* ***It won't continue the theme but will use advanced*** *Uridium-***style graphics. The game, which doesn't even have a name yet, will be a mega-blast. There'll be bubbling noises, gremlin-like monsters and a mechanised hero***

● *In-house programmers at Bubble Bus are planning a 3D arcade adventure called* ***Fifth Quadrant.*** *It stars Captain Slog who, with his crewmen – Clott, Knut and Bodd, must drive the evil Zimen off*

● ***Access is converting*** *Tenth Frame,* ***the American 10-pin bowling simulation. It features League and Opening bowling and will be launched (rolled out?) by US Gold in late spring***

● *Delta 4, responsible for* ***Colour of Magic*** *and* ***The Boggit,*** *is producing a detective spoof for Piranha. So Fergus gets his wish. It's not a licenced title, but will include characters who would look at home in books by Raymond Chandler or Mickey Spillane. And, as always, the humour is everything (or nothing depending on what you reckon to Fergus' previous outpourings)*

● ***The team of in-house programmers at Ocean is producing*** *Arcanoid,* ***taken from the fabulous Konami coin-op. The game is played in a similar way to*** *Breakout,* ***with a bat and ball. OK, so it doesn't sound so fabulous so far, but the brick walls are strangely shaped and contain power pills which give a defence against the games monsters.***

Newsdate : February

Whodu

Zammo!

Glider Rider **programmer John Pickford is following up his smash title with a** Grange Hill **game!**

It'll be based on the hit TV series and released at the end of February on the same label as Glider Rider, **Argus.**

The main character in the game is the school wide-boy Hollo. He and his mate Gonch break into school after it's closed to get back a Walkman that's been confiscated by a teacher.

The hi-fi belongs to his mum who needs it that evening (natch).

And if he goes home without it he'll be in deep schtuck!

Grange Hill **is controlled via a menu system similar to Mastertronic's** Spellbound. **Press *Fire* and a menu appears. Use the cursor keys to move arrow cursor over the options and press *Fire* again to select. Options include *Pick-up*, *Drop* and *Speak*.**

The school's chock-full of characters to make Hollo's life a pain in the blackboard. Teachers hunt him down. There's the caretaker, Emelda the witch, and a drug pusher – if you speak to him you'll have to start the game again (Wot's this? A game with a message? Too right).

The game's been designed by Colin Jones, who wrote Deus Ex Machina **so you can expect it to be very, well, wierd. And John Pickford, who also programmed** Zub **(see CodeTalk this** SU**, page 67) is doing the coding so it looks like a top-flight effort all round. Surely it's not going to be a licencing deal prog that's good to play as well? Whatever will they think of next?**

Although the BBC puts out the television series it's had very little to do with the game. (Probably a good thing too, judging by most of BBC Soft's releases).

Peter Holme at Argus divulges some

BULLETS

■ Meep! Meep! US Gold is 'bout to produce an arcade game round that impossibly daft cartoon character Road Runner. In there also will, natch, be his arch enemy Wily Cooyote. Could be brill but it's unlikely to be a speedy release

■ Bubble Bus is converting its Commodore 64 (wash ma mouf art) release **Skate Rock** to the Spectrum. Yup, it's skateboarding in the streets. Mind them cars, ramps, flags, posts and skiddy oil. **Paperboy** on a board. Hope it's not a stiff

■ Red Box has launched a warbling alarm add-on for its home security system. (At SU we always try to bring you the stories with the widest appeal)

■ US Gold is launching a joystick in late spring. Actually it's in a box. Ha blimmin' ha. The stick is being produced by Britannia Software, of **Dempsey and Makepeace** (and where's that) fame. It'll cost £14.95 and it may even bear a resemblence to Britannia's own Phaser 1 stick. Either way it should make US Gold's games easier to play, especially **World Cup Carnival** (Hey, you guy's at SU. Knock it off. So it was a duffo prod release, but haven't we paid our dues on that one?)

■ Mastertronic has launched a new software label, Bulldog. What it needs to do that for is far from clear especially since the games will be priced as usual at £1.99. Sounds like the old washing powder wheeze – by which you launch so many brands all the same that there's no room for your competitors. And that's worked so well for Firebird already hasn't it... well akcheloi, er, no. It hasn't. Anyhow Mastertronic wants us all to believe the titles will emphasise the excellence of the British software industry. Blah! Blah! The first Best of British release is an aracade game, called **Feud.** Margaret Thatcher, take note

■ Elite's 2.99 Classics label looks ready for the chop as the software royalty row between the budget label and Vortex and CP Software, (January SU), gets sorted out. Vortex and CP had claimed that Foundry Business Systems, part of the Elite empire, hadn't payed royalties for games on the 2.99 label. But the label has now been put on hold due to disappointing initial sales. Whassis all mean Steve?

■ Channel 4 has a lot to answer for. For a kick-off there's American Football, without which we'd all think the fridge is where you find frozen peas. Anyway Nexus has the licence to produce a game around this year's SuperBowl. The company's taken a leaf out of Ocean's book and will bring the game, called **Super Sunday,** out in the summer. That's, depending on your view, either eight months after this year's SuperBowl or six months before the next.

■ And speaking of Nexus, which I 'spose we were, the label is just about to knock out a mysterious little number called **Firestorm.** It's still top secret (yawn) but Ian Ellery, one of the guys at the company says it'll be simply stunning. Like **Nexus** on the Spectrum, Ian? Cheap joke, but it's worth a laff, innit?

unwot

Newsdate : February

of the background info: "It's based on a book *After Hours* written by the series' creator Phil Redmond.

"The BBC licences *Grange Hill* from Phil Redmond Enterprises and they've had strict control over the game's plot. No doubt he's reported back to the BBC but they've got no control over the project."

The anti-drugs theme – Just Say No – is a crucial element in the game but, according to Holme the subject's treatment in the game was a matter of some debate. "The drugs theme runs through all the books, videos and albums generated from the series. It had to go in the game but we didn't want to either make light of it or treat it in too heavy-handed a way." Argus thinks the game's coverage is just right.

Grange Hill **is being released on the show's tenth anniversary in Feb. The new series is already on TV and another is due to start filming.**

No price has yet been fixed for the game, although Argus hopes to put it out at £8.95■

■ Ariolasoft has screwed up somewhat and its big (?) new products missed the Christmas boom. It's version of **Marble Madness** from the Atari coin-op – is still on the micro equivalent of the cutting room floor and the company has just admitted that initial stocks of **They Stole A Million** contained a bug. Aaarghh! Not A BUG! 'Fraid so chaps. The two games are likely to appear sometime this month...

■ US Gold has finally tied up the license for the coin-op **Indianna Jones and of Temple Doom.** Having announced the thing way back last Summer it's good to know the lad's in Brum can follow thru and actually sign up the things they've said they've signed up. The Spectrum version of the game is likely to appear in early autumn. Which is another way of saying it could be number one a year from now... who says this industry has no future? Yes, who does?

■ Naff link, I know, but early production versions of US Gold's **Gauntlet** proved to be incompatible with the 128K+2 which was a bit of a blow for a game already a mite tardy in its release. According to Richard Tidsall, the company's marketing manager, "We've had to remaster **Gauntlet** because the 128K+2's cassette recorder couldn't cope". Some would say the problem lies with the azimuth alignment of the new Spectrum which does not handle turbo-load programs very efficiently. Others, like Amstrad, would blame US Gold. Who said Sugar is a sweetie, then?

adapt electronics

spectrum 128 bright module

on patent pending

■ A *Bright* output facility on a monitor? They said it couldn't be done, but Adapt Electronics has launched an RGB interface which will give that magic function on the 128K+2. The RGB costs £30.95 from Adapt Electronics, 20 Starling Close, Buckhurst Hill, Essex, IG9 5TN

■ Gremlin Graphics (of **Trailblazer, Avenger** etc) is launching a new 'mid-price' range of games between budget and full price. The first release will be **West Bank** at £4.99. The snag is it's rehashed old stuff. The arcade shoot-the-baddies-behind-the-doors game was originally launched by Gremlin last year at £7.95.

■ US Gold has also gob(bl)ed up the rights to **Metro Cross,** a coin-op only just in the arcades. It's a jumping game with a pleathora of obstacles, including rolling Coke (sorry, Cola) cans

■ *Micro Live*, the BBC computer series which covers developments in the home and business micro scene, could be for the chop – and not a moment too soon, in our view. The show's future is 'under discussion', according to a BBC spokesman and no future series has been planned. Time to put Lesley Judd on a farming program?

■ Gargoyle, the heavy **Heavy on the Magick** programming team, has caught the attention of Piranha. The **Trap Door** firm is mightily impressed with the work done by Gargoyle on **Scooby Doo** (for Elite), and so Gargoyle could be in the running to produce one of nine new games by Piranha

TWTMTW
THAT WAS THE MONTH THAT WAS

What was what month that was? Boring!.

Don't these software houses know we're all still here?

It's pretty annoying the way each year most of the best titles – all the big licences, film and coin-op converts, shoot 'em ups and adventures – get released in the few short weeks at the end of the year.

This January is actually shaping up to be a bit better than usual but this issue still only has two SU Classic games – and both of those are for revamped old stuff.

You'd think, too, that software houses would want to cash in on all the new owners who got 128K+2s for presents, wouldn't you?

Come on guys, the world doesn't stop at Christmas! We all still go right on playing games.

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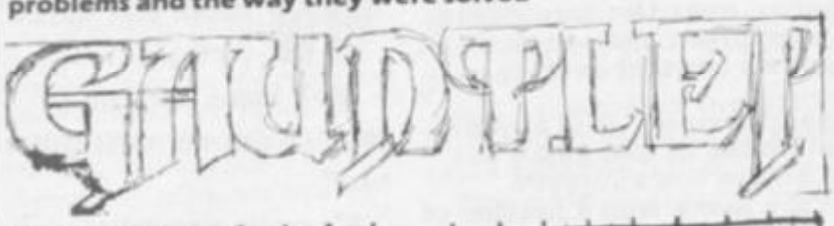
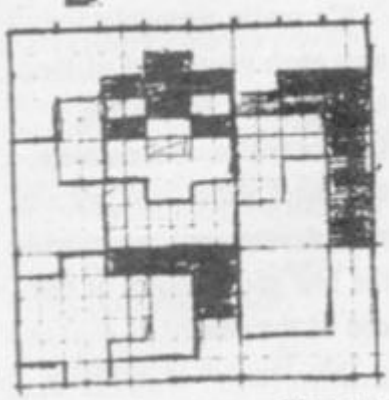
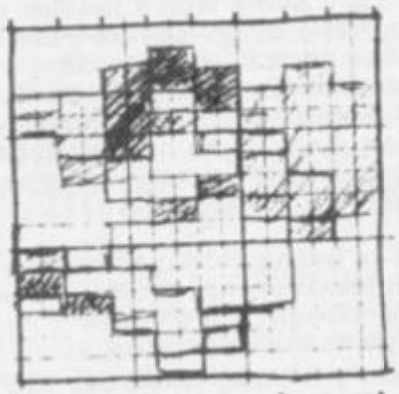
BACKGROUND NOISE

Background Noise looks behind the top games of the moment and speaks to the programmers who sweated blood to produce them. Background Noise looks from the author's point of view — at the particular programming problems and the way they were solved







All versions were written on a Pinnacle mini computer and then down-loaded to the target machine. This meant that the level maps were all available to everyone, for instance. The Pinnacle is extremely fast and contains two 68000 processors running at 12 megahertz with several megabytes of memory! We have four terminals and a printer connected to the machine.

We felt that rather than develop the Spectrum version first and then convert it to the Amstrad which most software houses seem to do, we would work the other way. The result has been that the Spectrum version of Gauntlet is more accurate than we originally thought it could be. Had we written this version first, we may have simply accepted the limitations we thought the machine imposed.

As it now stands, the Spectrum is the fastest version of all and although the graphics are not as colourful as the Amstrad, its extra detail more than makes up for it.

The sound effects and music on the 128K matches the Amstrad sounds exactly but there is the bonus of being able to use the speaker built into your television.

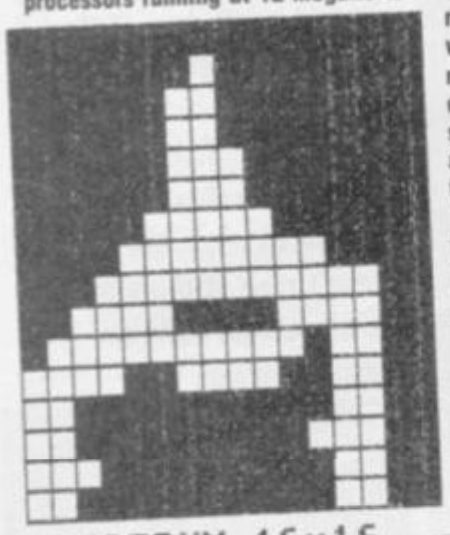
Another advantage of the Pinnacle for development has been with the sound effects. Bill's unique sound routines are exceptionally efficient and use data which is compatible across all computers. Bob can download data into the Commodore and Tony can use the identical data on the Spectrum to create the same effect.

The arcade machine has over one hundred different mazes. On top of that. Some of the levels contain up to twenty exits from which the computer chooses one at random! All of our conversions have access to every one of these original levels.

We have added our own devious mazes, however, and the Spectrum version now contains over five hundred levels. Over three thousand screens of fast action!

The difficulty with the graphics has been cutting the figures down from a resolution of twenty-four by twenty-four pixels on the original, to sixteen by sixteen on the Spectrum, and eight by sixteen on the other machines. Obviously the animation on the Spectrum is twice as smooth as the other versions. The title screen posed most problems – it is so detailed that attribute clash is impossible to avoid. We nearly released it in monchrome!■

Bob and Kev and Bill and Tony and Geoff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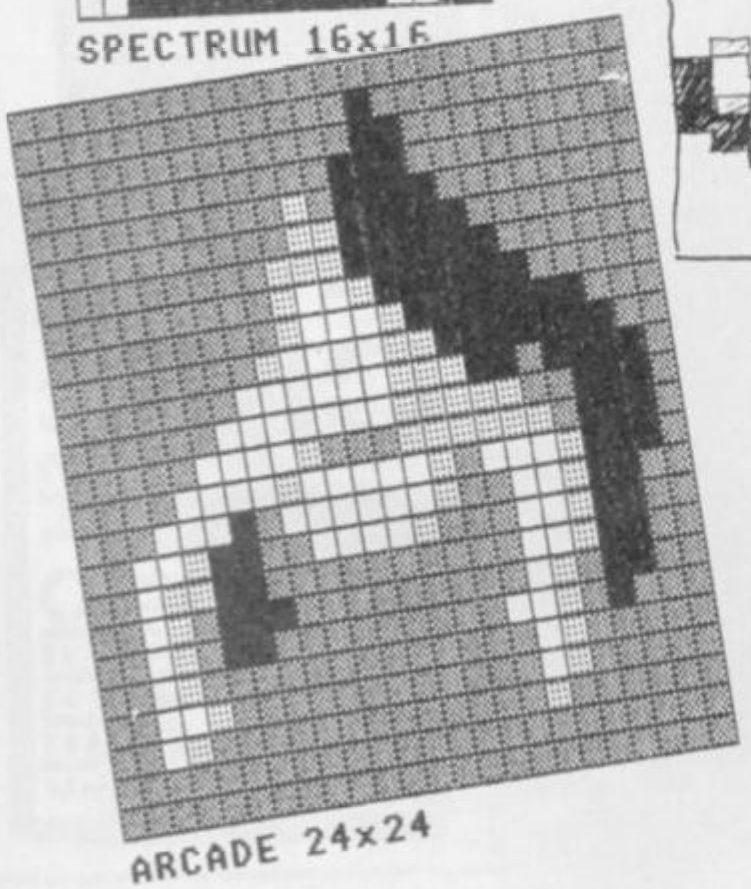
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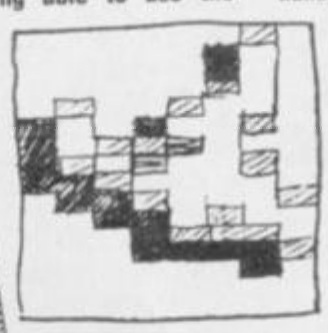

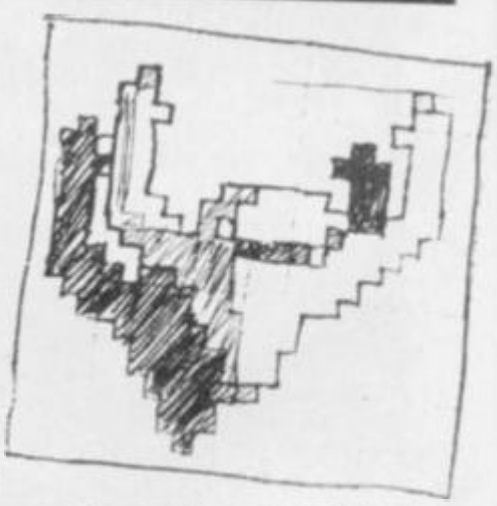

GAUNTLET: A DIARY OF EVENTS

March	Bob sees and plays Gauntlet
April	Bob starts on demo program on Atari
	Kev start on the title screen on the Atari
May	Bob and Kev show Geoff Brown at US Gold the resulting demo
June	Talks with Ian Stewart of Gremlin Graphics in Sheffield about joining Gremlin and setting up a Birmingham branch – Bill and Tony are finishing the Eidolon conversions and agree to join when finished. Geoff offers conversion job – everyone leaps at the chance. Small office in Birmingham organised. Move into office – arrange furniture, set up computers, pile up boxes in the corner of the room, unpack *Gauntlet* machine – rearrange furniture! Find coffee machine – drink coffee – play *Gauntlet* – Atari title screen finished
July	Bob starts writing accurate version on the Atari. Kev makes sketches from the machine and starts game graphics. Bill and Tony arrive. Bill starts writing sound effects utility. Tony starts Amstrad graphics utility. Bill ports Atari graphics to Amstrad. Kev colours in and enhances graphics. Tony devises room compression technique and writes editor. Bill breaks warriors joystick! Bob brings in percolator. Commodore programmer sacked – Bob postpones Atari version and starts Commodore version.
August	Sandwich lady finds us – eat. We find pub – drink. Rearrange tables again – breathe! Bob gets full-colour 8-way scrolling going on C64. Kev erases finished Amstrad title screen – breaks down. Move to Centresoft's new premises arranged. *Gauntlet* machine squeezed into lift. Computers packed away – furniture dismantled. Everything moved to Holford. Furniture unpacked and computers turned on. *Gauntlet* machine prised out of lift – Key found behind it.
September	Meet the sales staff – barricade programming room. See Ferrari, Porsche, Jaguar. . . Look for pub – find pub. Look for bank – find pub. Bob goes to Olympia to fix *Gauntlet* machine for PCW show.
October	Bill gets company car to drive Bob and Tony to work – never seen again! Amstrad version finished! Amstrad code ported on to the Spectrum – it works! Kev's new, detailed graphics added and program fine-tuned. Bob answers *Commodore Abuser's* Christmas questionaire. Spectrum version finished!
November	Bob's comments printed – Bob?!??? Bill and Tony get paid for Eidolon. Bill misquoted in C&VG, upside down, black and white and blurred.
December	Office Xmas party. Bob, upside down, black and white and blurred. Tony starts MSX version. Bob finished Commodore version!

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COMPETITION

WINNERS

Quackers!Duck Compo

Ducks. Remember the Duck competition? We thought it was probably the most stupid competition we'd ever done. I mean really, a duck poster and a duck game.

An' you loved it. The Incredible Duck Competition was the most successful competition we've ever had. Was this because it was easy? Are you all big duck fans? The EMAP New Projects Division is already talking about a Ducks and Ducking magazine on the strength of it.

Anyway, the answers were:
1) Donald Duck
2) Dave Dee Dozey Beaky Mick and Titch
3) Duck Soup
4(Duck Low Bridge
5) Playing Ducks and Drakes.
Thousands of people got it right – mainly because it wasn't that difficult. Those who entered and got it wrong – and there were a few – looked a bit of a spare duck at a . . . how does the joke go? But I digress – the ones who actually came out of the magic sack were:

Duck poster and game – 20 winners
Shane Evans, Port Talbot, West Galmorgan. Adam Cooper, Daventry, North Hants. Danny Morrison, Thamesmead, London. Zoie Ann Gritt, St Leonards, East Sussex. Stuart Morris, Thundersley, Benfleet, Essex. Jason Prosser, Chelmsleywood, Birmingham. Mark Williams, Sychdyn, Nr Mold, Clwyd. Ben Shrimpton, Wallington, Surrey. J Lopez Egea, Hove, Sussex. Mr S Parks, Kingsnorth, Ashford, Kent. James Chappel, Bexhill-on-Sea, East Sussex. Darren Kay, Cranfield, Beds. richard Davenport, Gawsworth, Macclesfield. Mark Brimson, Downend, Bristol. John Piper, Camberley, Surrey. Ian Gladden, West Derby, Liverpool. Steven Smith, Derby. Russel Smith, Chelmsford, Essex. Philip MaCleod, Thetford, Norfolk. Steven Bailey, Newcastle, Staffs.

Duck posters – 70 winners
Robert Herridge, Nr Bideford, North Devon. Anthony Hull, Rosendale, Lancs. Steven Aubrey, Midlothan, Scotland. Sheldon Smith, Lowestoft, Suffolk. Ronald Moore, Bathgate, Scott Graham, Newbie, Annan. Steven Bothwell, Coatbridge, Strathclyde. Mark Parry, St Mellons, Cardiff. John Moore, London, SW19. Steven Foster, Warrington, Cheshire.

Nicholas Henstock, Rotherham, South Yorkshire. Paul Yeomans, Acomb, York. Darren Edwards, Henley-on-Thames, Oxon. Mark Richardson, Orchard Park Estate, Hull. Alan Murray, Prescot, Merseyside. Steven Payne, Balsall Common, Coventry. Brian Murrall, Chemsleywood, Birmingham. Paul Williams, Thornbury, Nr Bristol. David Fright, Edmonton, N9. John Shayler, Watford, Herts. N Churchill, Buckhurst Hill, Essex. Derek Jenkins, Llanishen, Cardiff. M Gooulez, Camberley, Surrey. richard Lake, Whetstone, London. Marcus Bowman, Wellington, Somerset. Mark Balsom, Richmond, North Yorks. Paul Wakelin, Mountsorrel, Leics. Darren Hornby, Northwich, Ches. Nicola Marks, Harrow Weald, Harrow. Darren Taylor, Lewisham, London. James Atkinson, Launceston, Cornwall. A Thorpe, Seaham, Co Durham. Stephen Christie, Glasgow. Paul Hutchinson, Thornaby, Cleveland. Trevor Williams, Farnham, Surrey. Chris White, Ashford, Middlesex. Philip Mortand, Darlington, Co Durham. Michael Stirling, West Ferry, Dundee. John Kemp, Caistor, Lincolnshire. Andrew Hollis, Chesterfield, Derbyshire. R Slater, Maidstone, Kent. Paul & Matthew Oakes, Fixby, Huddersfield. Stuart Elliot, St Collumb, Cornwall, Daniel Burd, Denmead, Portsmouth. Steven Hyde, Warwick, Warwickshire. Christopher Hubbard, Romford, Essex. Jonathan Perry, Toddington, Beds. Andrew Norton, High Wycombe, Bucks. Andrew Myers, Heaton Chapel, Stockport. Miss E M Dron, Sutton, Surrey. S. Bowman, Kings Lynn, Norfolk. D. Woodward, Stubbington Fareham, Hants, Christopher Penn, Canvey Island, Essex, R Abbott, North End Portsmouth, Hants. Darren Martin, Sutton Coldfield, W. Midlands. A Stanley, Hamworthy, Poole, Dorset. Richard Callen, Lawrence Weston, Bristol. David Parry, Knotty Ash, Liverpool. Darren Storrie, Wandsworth, London. Lawrence Martin, Haverhill, Suffolk. Phillip Cowan, Sacriston, Durham. Stuart Garland, Kingswood, Bristol. Ian Bridger, Eltham, London. Mark Wilkinson, Rainhill, Merseyside. Keith Hughes, Cheltenham, Gloucestershire. Harry Maton, Croydon, Surrey. Stephen Barker, Fenton, S-O-T, Staffs. Andrew Spalding, Bedford, Beds. Neil Shukia, Edenthorpe, Doncaster. David Butler, Monkstown, Newtonabbey.

▲His golden prize

Terribly Trivial

You may remember the excruitiatingly hard Trivial Pursuit competition which appeared in this magazine a couple of months back. The winner was Alan Choo-Kang and he became our representative in the Trivial Pursuit knock-out competition to win a solid gold (gasp gasp) Trivial Pursuit set.

There were twelve contestents each representing a different mag and we didn't win. But hold hard there, stay those tears. Alan Choo Kang did brilliant, becoming the youngest contestant in the final (17) and only eventually being pipped to the post by a polytechnic lecturer of middling years with a serious beard.

Alan won a regular Trivial Pursuit **Genus II** *set and gets our warmest congratulations for doing so well.*

▲Alan Choo-kang ▲The poly man

Colossal Colossus

Clearly the Chess competition was not as easy as the Duck compo and a surprising number of people entered and got it wrong. The phrase that wasn't really a chess term was Knight's Leap, as in: "I haven't had a good Knight's Leap in ages".

Some people didn't spot it. Dumb.

The overall winner who gets the chess computer is Sheldon smith of Lowestoft, Suffolk who gets a Chess Computer. The ten others who get copies of CDS's **Colossus 4 Chess** Program are:
John Corr, Feltham, Middx. James Prouten, Jersey, CI. T V raven, Pen-Y-Fan, Llanelli, Dyfed. D J Firman, North Harrow, Middx. George Taylor, Halifax, W. Yorks. Rod Shaw, Lodge Lane, Nailsea, Avon. Patrick Kelly, Clapham South, London. Andrew Miskin, Old Portsmouth, Hants. william Wallace, Burntisland, Fife Scotland. Terry Hunt, Fannington, Bridgewater, Somerset.

XEVIOUS

ARCADE REVIEW

When you take away the awesome graphics from **Xevious** you're left with a pretty average sort of game.

So it goes. In the arcades **Xevious** looked astonishing. Spaceships looked really metallic and the landscape looked like it was real.

What can you expect from the Spectrum version? It's two-colour, green and black, and some of the background features lack detail. For example, the **Xevious** 'roads' are reduced to lines making them considerably less impressive than in the original.

There *are* some positive trade offs for some of these compromises however. No attribute clash, obviously, and a fair degree of detail in the spacecraft and some of the 'set piece' background sections.

Clever use of shading gives some of the sprites in **Xevious** a solid look too, an illusion of 3D. They may not actually look like metal as in the original but they look more substantial than with most similar games.

FACTS BOX

A good shoot 'em up and a reasonable conversion of an arcade classic. A definite maybe for joystick junkies

XEVIOUS
Label: US Gold
Author: Probe Software
Price: £9.95
Joysticks: various
Memory: 48K/128K

Reviewer: Graham Taylor

★★★★☆

As a game **Xevious** follows a classic pattern. It scrolls top to bottom with waves of aliens to be blasted or avoided, getting ever more vicious and ever more erratic in their movement as you penetrate deeper into the game. There are ground bases you can destroy with difficulty – they lob bombs in your general direction – and finally there's a mothership you destroy only by hitting it in one specific spot (in this case the central reactor).

HINTS AND TIPS

- **Learn the layout of the gun emplacements and line your ship up, in advance, with one in turn**
- **Always try to destroy emplacements. Start firing the moment you see one, otherwise your chances of getting past without destorying it are pretty low**
- **Even if you have passed an emplacement keep your eyes open – they frequently lob a last bomb straight at you**
- **Learn the patterns of the alien ships. The disc-shaped ones, for example, move in a fairly simple zig-zag that is relatively easy to aviod if you are prepared**
- **Fire continuously!**
- **Don't stay on the bottom of the screen. You may get trapped. Instead, give yourself plenty of room for movement**

You must have heard this one before. Apart from anything else 90 percent of **Lightforce** follows this formula.

Mainly it's about stabbing away at the joystick and watching out for stray bombs.

There are some definite techniques you can learn to help you survive longer. After a half hour's play I just managed to creep on to the bottom of the high scores board.

So what do I think of **Xevious**? I think it's a better than average shoot 'em up and as a conversion it's pretty good.

I'd like to have seen what Faster Than light would have done with it though■

SOFTWARE STAR RATINGS

All software reviews carry a star rating, the basis of which is value for money programming, graphics, speed, speech and sound presentation and addictiveness

★★★★★
Solid gold. Buy it

★★★★☆
Well worth the folding stuff

★★★☆☆
Pretty average

★★☆☆☆
Very poor. Probably over-priced too

★☆☆☆☆
A total rip-off. Complain loudly

Each review carries an icon which shows the type of software.

Arcade is for animated games, which in general, reduce the life span of your joysticks.

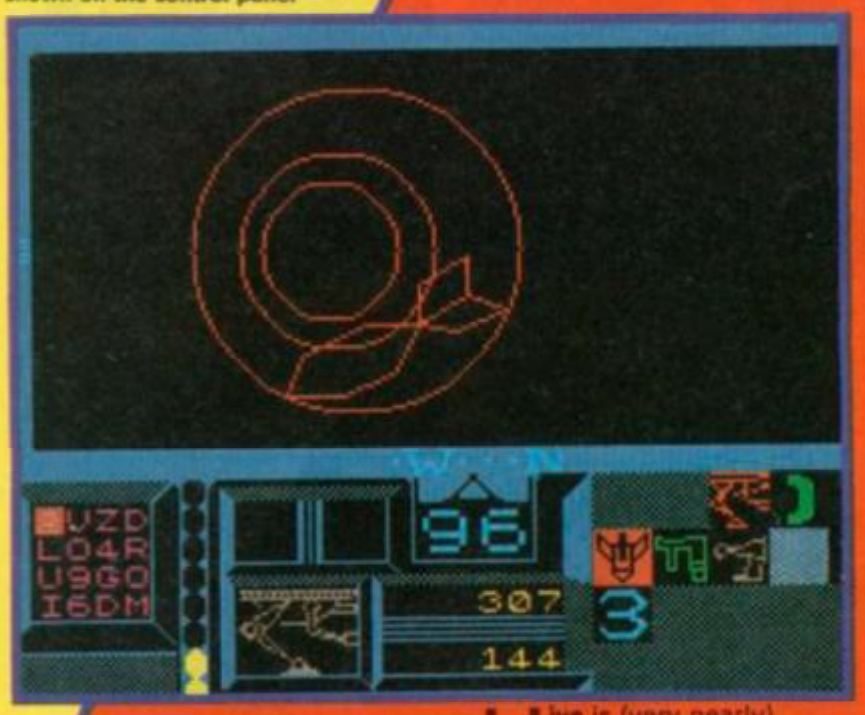
Toolkit covers programming utilities which improve the quality of home-made software or packages which make machine code easier to write.

Work Out, software which can be used in the home, such as car maintenance or home finance.

Strategy and Simulation are games where thought, planning and judgement are the principle skills required.

Adventure includes either graphic or text adventures.

▼ The complete screen ● You've found a bomb ● could be useful for blowing away the steel bars which block your path ● Your markers are shown on the control panel



HIVE

FACTS BOX

Technically brilliant 3D game. But the strongly map based gameplay may not be to everyone's taste.

THE HIVE
Label: Firebird
Authors: Torus
Price: £9.95
Memory: 48K/128K
Joysticks: various

Reviewer: Graham Taylor

★★★★★

Hive is (very nearly) completely original. A 3D journey through the endless passages of an alien hive.

Endless geometric tunnels and constant attack from the hive's inhabitants. These include not only insect-like objects but the occasional TV sets. Bizarre eh?

What you think about **Hive** is going to depend an awful lot on how you felt about **Gyron**. They've both been designed and programmed by the same team, Torus (who, incdentally converted **Elite** for the Spectrum). As you will have gathered, Torus are 3D wire-frame graphics specialists.

Some people absolutely loved **Gyron**, true they were mostly brainy nuclear physics types but there is no doubt it was a game of extraordinary complexity. I liked it in theory but in practice gave it up after about a week.

Hive is not exactly like **Gyron**, though. It isn't quite so austere for one thing: it has things to pick up and find uses for, it has things to shoot at that aren't abstract geometrical concepts. And it has a definite goal to achieve – find your way through a vast maze of tunnels to the Queen's chamber and destroy her.

Having said all of that there is something very geometric about the looks of the all two-colour game – the triangular aliens, square TV's zooming at you and the tunnel that forms the 'playing area' of the game is mostly constructed out of circles so positioned that it creates the illusion of 3D.

Hive, like **Gyron**, looks like it started life as a mathematical concept but got a little further than **Gyron** in the direction of a game.

The first time I saw **Hive** it reminded me of nothing so much as a sort of poor man's **3D Tunnel** (one of the great ignored games of our time) by New Generation. Where that game created a tunnel effect using slabs of colour **Hive** features only circles.

The first impression was wrong, though. I began to realise just how vast the game is. It becomes apparent too, that there is a great deal more to the playing of the game than meets the eye.

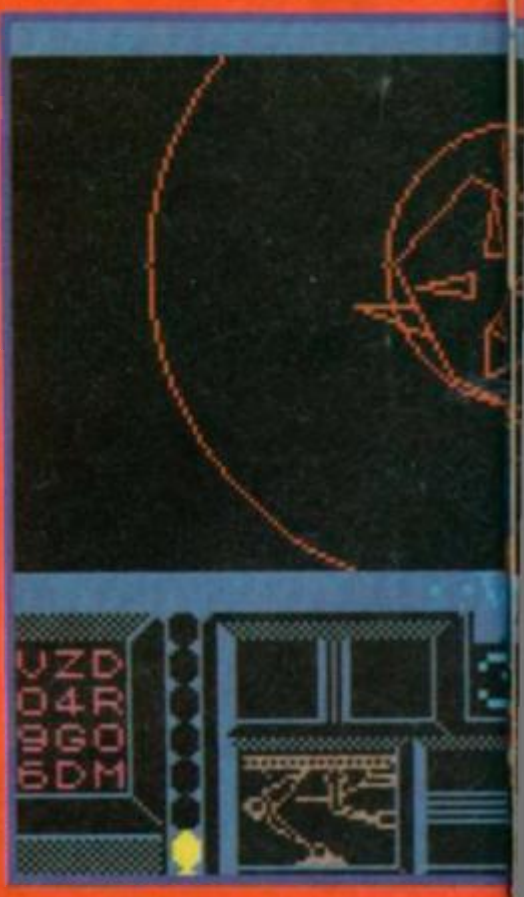
It's a mapping job for sure. You'd better enjoy spending a lot of time, lost, confused and in the same cul de sac again and again and again.

One of the features of this aspect of the game are the various special ways you can help yourself not to get lost. You have three markers – literally numbers that you can drop wherever you want so that you will know when you've passed over that spot before. More useful still is a system of codes which change as you pass through 'gates' in the maze (a bit like checkpoints in a car rally). This code is automatically up-dated and by noting it down you may subsequently get back to the same spot just by entering the code again.

It was only through being armed with a dozen or so of these codes that I was able to investigate the later sections of the game. This revealed that though essentially you still get the same overall effect, the game livens up considerably with blocked exits and massed assaults from assorted alien hoards. Actually even the bee orientated alien hoards have a strongly geometrical look about them.

You are a sort of battle space hopper which can not only hurtle down the maze in the usual up-down-left-right-faster-slower manner but can also duck under stalegtites and jump over stalegmites, poison webs and other obstacles.

There are a number of special objects you can pick up which may be useful later on in the game. These are selected on a neat icon grid. Items include various sorts of shield, a 'freeze' device that stops insects in their tracks and long-range grabbers that enable you to reach for



objects that are 'behind' areas of the maze shut off by steel bars.

Some of the later levels feature obstacles that aren't entirely bee related – like television sets. These hurtle through the maze and threaten to brain you. Television sets *are* rather geometric shapes. Even the giant faces that come towards you and can only be destroyed by several blasts to the eyes are em... well, you know.

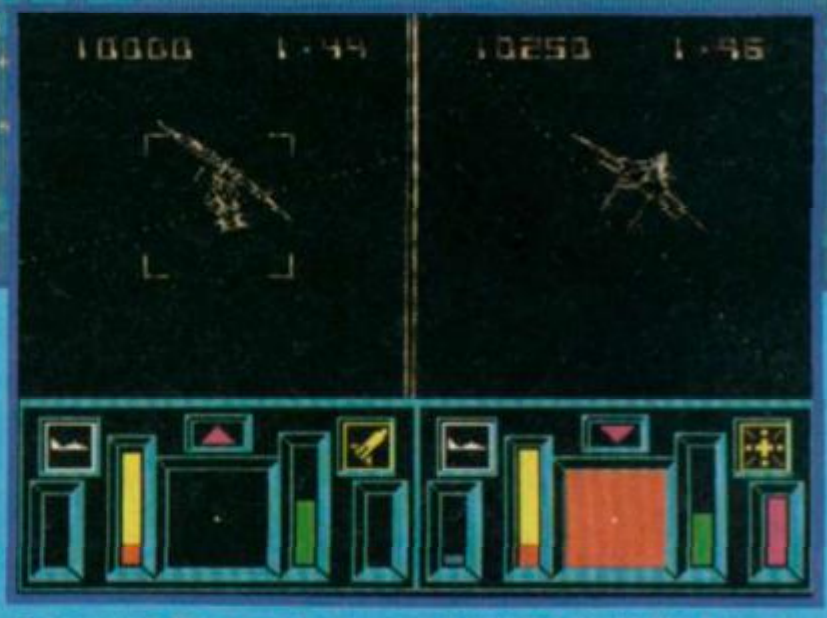
Sometimes the graphics look very impressive, sometimes less so, the 3D effect is for the most part quite convincing. If the screen shots don't look too incredible part is due to the fact that the 3D effect is achieved by the constant movement – the concentric rings expanding from the centre to fill the screen.

The game is certainly a challenge. My star rating for this one reflects my doubts that somehow the gameplay doesn't quite crack it, that all that mapping is going to get tedious. But I'm prepared to concede that for those people who adore complex mazes and mapping the game might well be a classic■

▲ Looks like trouble! ● You're about to be thrown in jail ● Then you need a key ● But have you got one yet?

ARCADE REVIEW

TOPGUN



Fabulous real-time graphics, a funky three-channel soundtrack and seat-of-the-pants action. Yes, Ocean has brought out yet another licensed game with none of these features.

The film from which the game of **Top Gun** was spawned relied on stunningly photographed dog fights between two F14 Tomcat jet fighters but Ocean hasn't even tried to recapture the excitement in its game graphics, which are almost non-existent.

Combat conveniently takes place at night, giving Ocean an excuse for black background on both cockpit views, a dotted line for the horizon and an occasional 3D vector graphics glance of your opponent.

What you get is a split screen showing two cockpit windows. The left window is yours and the right is used either by the computer's pilot – fairly unintelligent – or by a second human player using a dual joystick port. Read-outs show the position of the enemy, altitude, air speed and cannon temperature.

The result isn't exactly awe-inspiring. No doubt the programmers would argue that the lack of graphics speed is a result of animating windows. Sorry lads, that won't wash, not when we've seen the likes of **Scalectric** (also this SU) which uses a split-screen and full-colour graphics.

The gun sight in the middle of each cockpit window shows what type of weapons system is in operation. The cross hairs show that the machine gun – an ineffective weapon – is in operation. Side-winder missiles are targetted through a large block cursor. Get you opponent in the sights for longer than three secs and a missile is launched.

Ocean's Side-winders are strange objects. I hadn't realised that air turbulance, even at 10,000 feet, could make a rocket wriggle like a worm. The Side-winders flex in the middle as they jerk towards a target. They're heat seeking so an explosion is guaranteed. Unfortunately, it's not much cop when it happens. Just a **Batman**-style prickly bubble which wobbles across the screen.

The score screen, at the back-end of the game, continues **Top Gun's** far from racey pace. It's marked like a WWII score 'downs' card with the number of lives remaining pictured in 'plane outlines and a similar display for the number of aircraft you've potted.

Top Gun is a difficult game to get into but, once you find that your jet's got missiles, there's no looking back. Just select the Side-winder sights, bring the enemy into range – a simple matter with the radar – fire, and keep the enemy in the sights for three seconds. Then destruction is assured.

It's difficult to classify **Top Gun**. It doesn't make it as a jet simulation. On the other hand it's not an arcade game either – there's not enough action.

In fact it's pretty dull all round■

FACTS BOX

Ocean fails to realise the potential of another potentially terrific plot. Dull graphics and very little depth.

TOP GUN
Label: Ocean
Price: £7.95
Memory: 48K/128K

Reviewer: John Gilbert

★★★☆☆

Crime is a disease. He's the cure.

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TERRA CRESTA

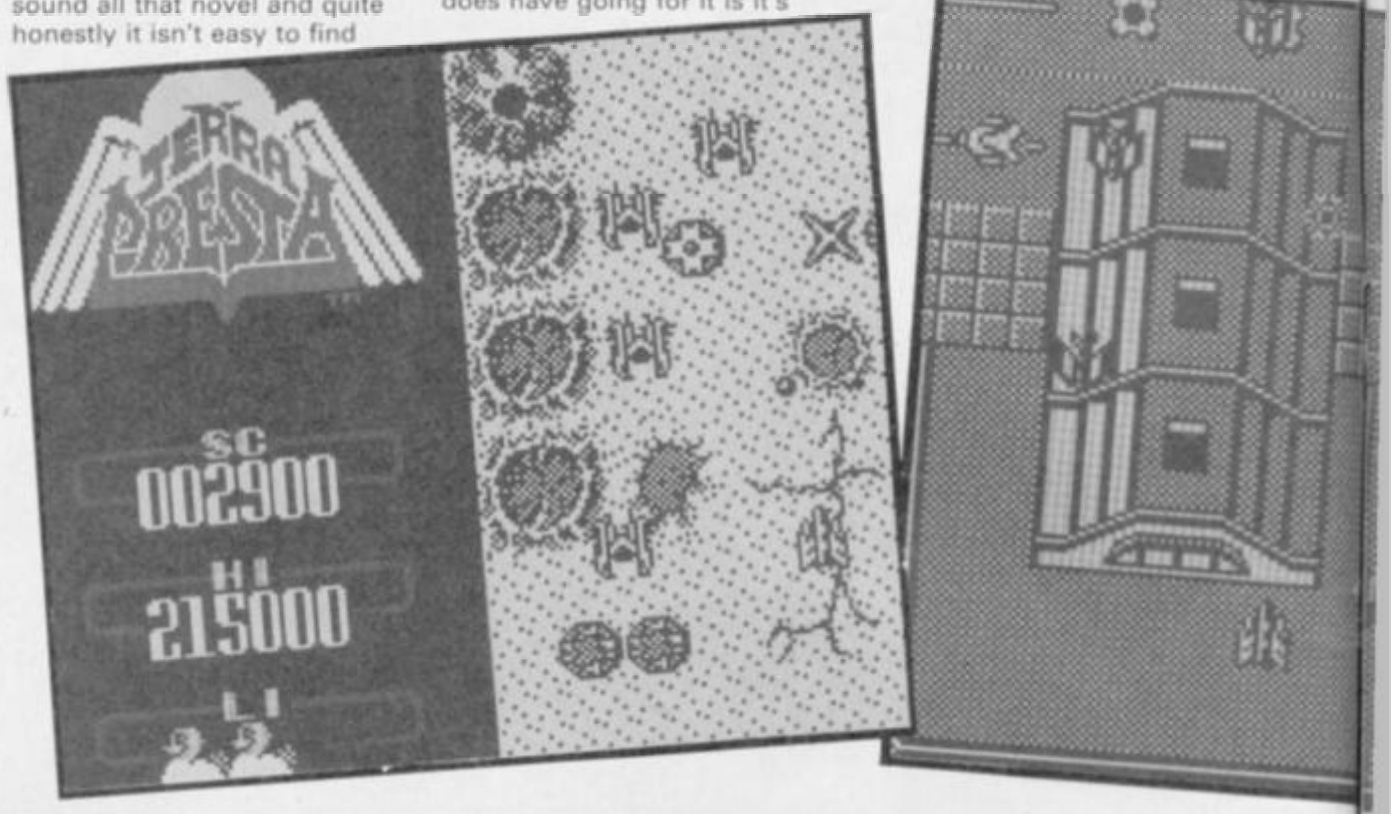
Terra Cresta is one of a crop of arcade conversions that have cropped up recently. It's getting difficult to tell them apart. Playing **Terra Cresta**, for example, is more or less the same experience as playing **Xevious**.

It features a predominantly yellow background, the sprites are pretty smooth and the whole thing is quite detailed.

And, actually, there are few reasons to choose this one over **Xevious** (see page 23).

The idea is to fly along killing things. Now I know this doesn't sound all that novel and quite honestly it isn't easy to find anything very original to say about the concept.

But the one thing **Terra Cresta** does have going for it is it's extremely difficult. Not only are there waves and waves of



FACTS BOX

Conveyor-belt blast 'em up arcade conversion. Not bad, but not really exceptional either. Its strength is it's a toughy

TERRA CRESTA
Label: Imagine
Author: in-house
Price: £7.95
Memory: 48K/128K
Joysticks: various

Reviewer: Graham Taylor

★★★☆☆

MASTERS OF THE UNIV

Eternia, a land of high fantasy, has been enslaved by the skull-faced warlord Skeletor and his hoardes of monsterous misfits.

Castle Greyskull has been captured, the good Scorceress banished, and Orko trapped within the castle by his own 'imprison' spell.

Any of this mean anything to you? Yep. It's all got something to do with the mega-popular ITV cartoon adventure series **He-Man and the Masters of the Universe**. First a cartoon film, now a US Gold game.

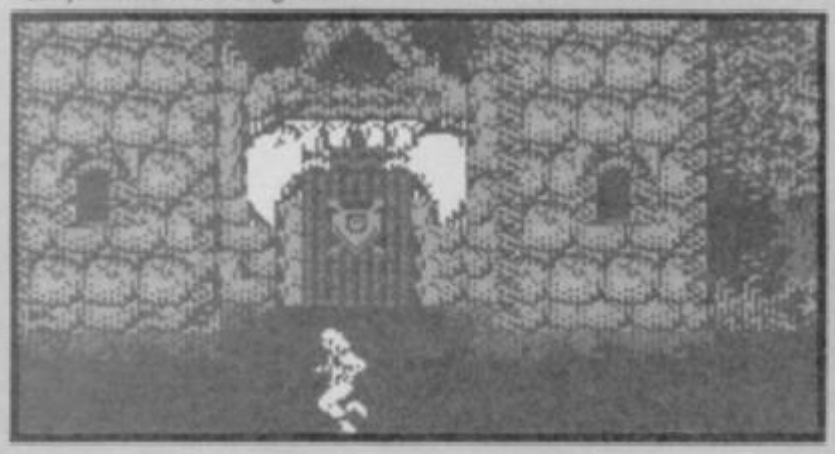
You guide He-Man through a **Jet Set Willy**-inspired landscape of platforms and mossy walls. There's screen upon screen with the added action of some combat. Find your way into the castle and find the ingredients of a spell which Orko can cast once he's been released.

Sounds good so far. Pity, really. While the backgrounds are full colour and He-Man is smoothly animated, US Gold has choosen to combat colour clash by building a large black rectangle around his lithe, yellow, outline. It moves with the figure blotting out trees walls and laser beams as it goes. Similar to the black 'shadow' outlines round the figures in **Dark Sceptre** but nowhere near as subtle. I'm afraid I found it hugely distracting and very irritating.

He-Man's quest starts in the everglades outside the laser barrier set up by Skeletor to protect castle Greyskull. You start the game with only one method of attack: a slashing stroke with your power sword. Hold the *Fire* button down to bring the sword into the strike position and release it to attack.

Alternatively, you can guide He-Man to one of the many power puddles scattered around the everglades and castle. Step on them and his sword is energised, and suddenly capable of firing an energy bolt at any passing monster he cares to blast.

To get into the castle He-Man races across the jerkily animated screens (shame about that), jumps over two laser barriers and collects a key. Each castle room has a different and more cunningly difficult arrangement of levels, large sprites and green, mossy, walls.



FACTS BOX

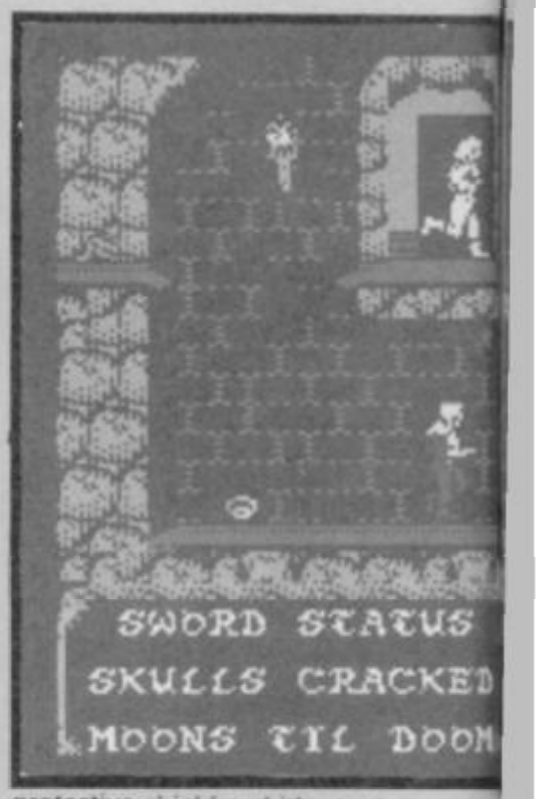
It's big, colourful and complex, some of the puzzles take some thought but the graphics are really naff

HE-MAN AND THE MASTERS OF THE UNIVERSE
Label: US Gold
Price: £7.95
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

★★★☆☆

He-Man'a adversaries are a mixture of fantasy figures, most of them Skeletor clones, and laser firing robots. One blast from the power sword is enough to dispel them, but each time they hit He-Man with their magic power his body shield is drained slightly. Lose your protective shield and it's start again time – just like life, really.



The ingredients you need for the spell, which will turn the Sword of Power into an Atom Smasher capable of destroying Skeletor, are mostly found within Castle Greyskull.

There are six objects to collect, including an orchid and a bottle of spice. Each one is stored in a specimen jar on the status screen when it's picked up. Once you've found Orko he takes the ingredients and uses them to strip Skeletor of his

aliens which swoop down on you lobbing air mines at odd angles, but some of the aliens venture back on to the screen from below, just when you think you've got past them.

There is slightly more to it than continually prodding your *Fire* button. The main feature of the game is the way you can build up your ship by blasting numbered silos. At each one you can add something to your ship. When, finally, your ship is completely assembled you get a crack at a robot which appears after each pass of the planet surface.

By the third pass only your ship in ultimate souped-up form can handle it. Lest this sounds like a complex element in the game, it isn't really: it still all comes down to blasting.

Graphics are fair, sound is the usual pseudo two-channel wobbly stuff and I guess if you're a big fan of the arcade machine you'll be pleased. I didn't actually dislike it and maybe I'd have been more enthusiastic if I hadn't seen **Lightforce** and **Xevious** first. It's certainly very hard indeed but somehow I couldn't get very enthusiastic about it■

VERSE

power and send him back to the evil caverns under Snake Mountain.

The very obvious graphics problems within **He-Man and the Universe** are mostly off-set by the large number of quite difficult problems in the game.

But it's unlikely to suit you if you don't know He-Man from Prince Adam. If, you're a fan though you'll be able to add it to the rest of your He-Man gear, the videos, soundtracks, posters, soldiers, comics and books. . .■

FACTS BOX

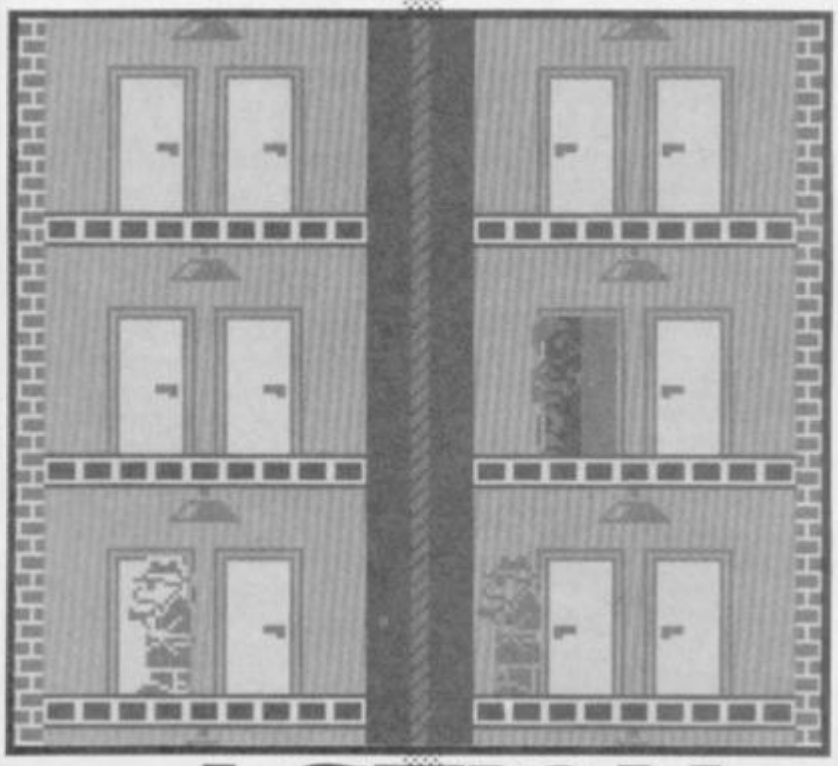
Conversion from the little known Taito coin-up turns out much better than expected. The play is pretty compulsive

ELEVATOR ACTION
Label: Qucksilva
Price: £7.95
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

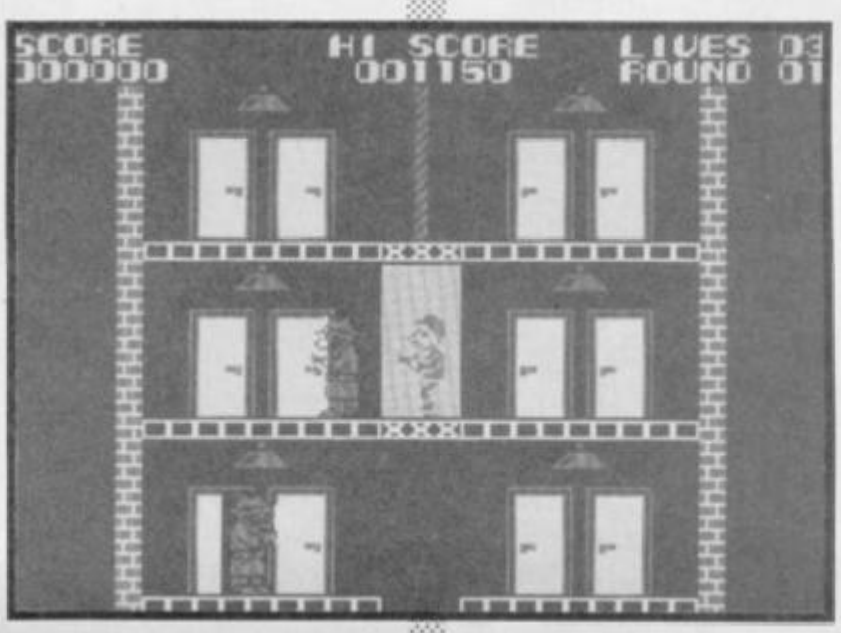
★★★★☆

ELEVATOR



ACTION

Unless I'm mistaken this is Quicksilva's first coin-op conversion.
It's taken from a Taito machine called **Elevator Action** which, though not particularly well known, is an addictive platforms thing.



ARCADE REVIEW

Use the elevators of the title to explore the levels of the enemy headquarters in search of secret documents. Each floor is protected by an enemy agent dressed in a blue mac and felt hat and you, as agent Otto, have to dispose of them with a gun or karate kick while they continuously fire their machine guns. Lots of jumping and ducking is indicated.

The elevators come and go and seem to have minds of their own but, once you've got Otto into one you can move it up and down under joystick control. Otto's movements in the lift are limited. He can only move from side to side and fire his gun. Meanwhile, the enemy agents fire across the lift shaft and anything that gets in the way of the line of bullets is cut in half.

Otto's own gun has two effects while he's in the elevator. If you keep your finger on the *Fire* button he'll mow down any enemy agents and, if you're lucky, knock out the building's lights. For the few moments that all the lights are out you have the opportunity to travel down a few extra floors in search of doors.

When you find a floor with a red door stop the lift and take Otto to the door handle and press down on the joystick. He'll slip into the room, nick the papers and leave. Then it's off to other floors and other doors.

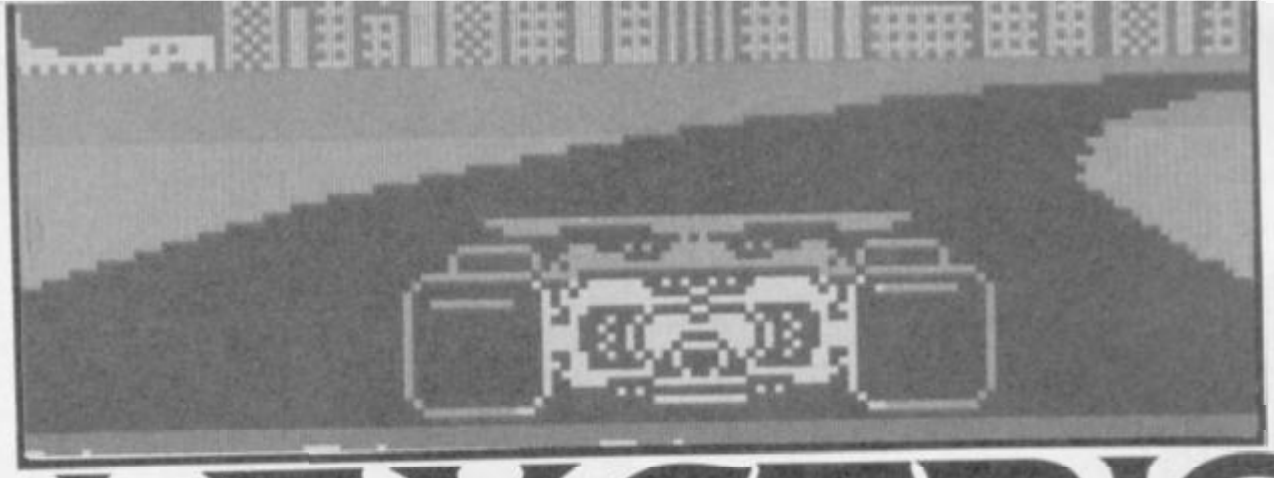
The lower levels of the HQ contain stairways and the most perverse layout of elevators I've ever seen. Otto will scoot up or down stairs at your joystick's command. He can also hold one lift on a floor and step off it on to another lift but you'll have to keep the stick down or Otto'll slide back up the building again.

Your score and the number of papers you find are the most important factors in playing **Elevator Action**. You score 100 points for each enemy agent you cut down, 150 for each set of papers you steal and 200 for every light you blow out.

It's funny. The game is so simple, but slipping from elevator to elevator, snuffing out the bad guys and shooting out the lights combine to make a pretty compulsive little joystick jerker. The graphics aren't the hottest I've seen but there's almost no visible colour clash, and the scrolling's smooth and fast.

I liked it■

ARCADE REVIEW



SCALEXCTRIC

Scalectric. Remember those toy slot-car racing sets a few years back?

The set-up is expensive but Leisure Genius has hit upon an inexpensive alternative. It's a kind of **Pole Position** construction set! Design a track, then take on a friend or the computer to see who will be first around its straights, curves and chicanes.

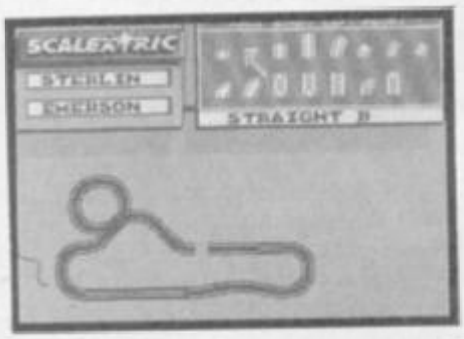
The circuit design phase is neatly icon-controlled. Set the track-laying arrow to where you want to place the starting gate, then select a horizontal (across the screen) or vertical (up the screen) position.

There are 15 types of track section including four types of curve just like the real thing: outer, standard, inner and banked.

Once you're happy with a circuit design you can save it to tape.

If, however, you don't want all that creative bother you can load in one of the 17 authentic Formula One circuits included in the package. Silverstone and Brands Hatch are available for your personal races but, if you want to go further afield, you can try Rio Brazil, Imola and Monaco among many others.

Either way, once the circuit is fixed the race proper begins.



FACTS BOX

It could be called Pole Position Construction Set. Not as fast as some racing games but the DIY design option compensates

SCALEXTRIC
Label: Leisure Genius
Author: Andrew Bradley
Price: £9.95
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

★★★★☆

Your car has a top speed of 240 mph but on the tightest curves you'll spin off at over 50.

Bumping against the grassy edge of the track slows you down and gives your opponent a chance to scrape past especially if you are on the hard option of the three play levels. The chicanes are the trickiest. The track narrows, so only one car can pass at a time. If you're overtaking your rival at the time you'll end up splashed all over a grassy verge.

The **Pole Position**-like 3D sequences, in which your car is in the top window and your opponent's at the bottom, are a bit slower than other race games but the track construction option, which is a whole lot of fun, more than makes up for it■

MARBLE MADNESS CONSTRUCTION SET

Here it is! The ultimate frustrating telly bashing, making the blood pressure go through the roof type game that you can actually devise yo your own devillishly difficult telly-bashing design. Mnn-hm – that famed original **Marble Madness** is back as a construction set.

I must admit a certain fondness for **Marble Madness**. The coin-op spawned so many small-screen look alikes last spring – with the likes of **Gyroscope** (hmm, wasn't that Melbourne House also?), **Spindizzy**, **Bobby Bearing** and even bits of **Quazatron**.

What you get is this. An already-in-memory track of 10 screens, each one progressively harder with all the pitfalls – other marbles, holes where holes shouldn't be, topsy turvey logs, and anti-magnetic slopes.

Then you can twiddle around and alter this track in any way by simple cursor movement, either that or you can add on additional tracks.

When you load up you get a menu and it's from this that you can either change controls, *Edit*, *Save/Load* or *Play*.

Choosing *Edit* puts you into the heart of the construction system and you can choose any of the 10 screens to work on. Simply move the cursor on to any of the shapes that are displayed at the side of the screen and press *Fire*.

This throws up your selected piece on to the screen for you to place where necessary. Also in view and selected by cursor are colours for both background and track, a text facility, wall or hole pieces and various traps to decorate the game with.

Go and get **MMCS!**■

FACTS BOX

This is a perfect example of how to tear your hair out in one easy lesson. It's so maddingly addictive, it's dangerous

MARBLE MADNESS CONSTRUCTION SET
Label: Melbourne House
Price: £8.95
Memory: 48K/128K

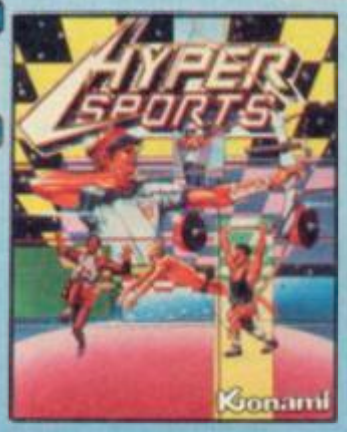
Reviewer: Andy Moss

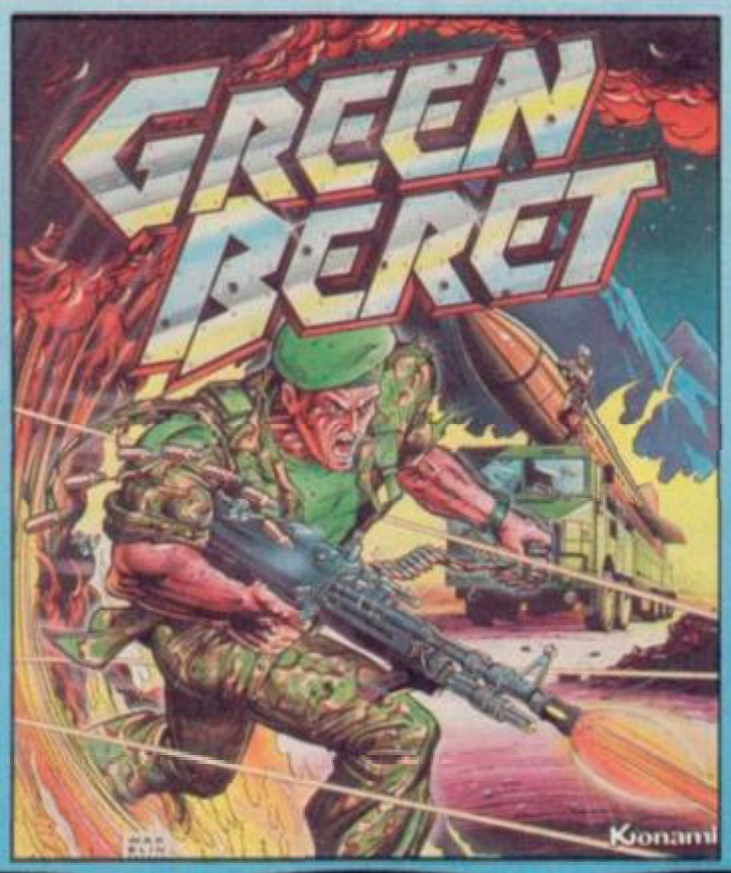
★★★★★

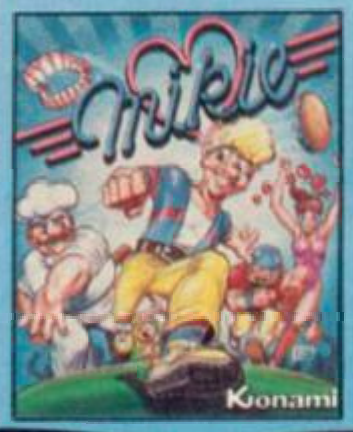
KONAMI'S COIN-OP HITS

FIVE GREAT ARCADE GAMES FOR THE PRICE OF ONE

IT MUST BE CHRISTMAS







KONAMI'S COIN-OP HITS

	Cassette	Disk
SPECTRUM	£9.95	–
COMMODORE	£9.95	£14.95
AMSTRAD	£9.95	£14.95

Twin Cassette Pack

imagine ...the name of the game

Imagine Software (1984) Limited, 6 Central Street, Manchester M2 5NS. Telephone: 061-834 3939 Telex: 669977.

Distributed in France by Ocean France. Telephone: 93-42-7144. Distributed in Germany by Rushware. Telephone: 2101-70040.

SINCLAIR User

T★O★P T★W

▲ In the top slot: Cobra

▲ Tip for the top: Gauntlet

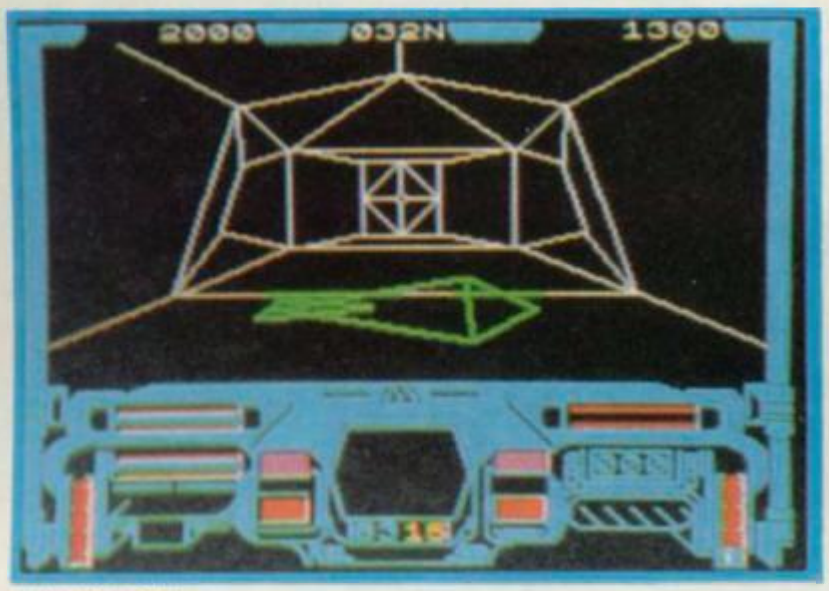
▲ Longest on the chart: Ninja Master

1	*NEW!*	COBRA	OCEAN	£7.95
2	(2)	OLLI AND LISA	FIREBIRD	£1.99
3	(3)	THE GREAT ESCAPE (CLASSIC)	OCEAN	£7.95
4	(1)	PAPERBOY	ELITE	£7.95
5	(5)	TRIVIAL PURSUIT (CLASSIC)	DOMARK	£14.95
6	(7)	URIDIUM (CLASSIC)	HEWSON	£8.95
7	*NEW!*	SCOOBY DOO	ELITE	£7.95
8	*NEW!*	BREAK THRU	US GOLD	£8.99
9	(17)	180	MASTERTRONIC	£1.99
10	*NEW!*	SHAO-LIN'S ROAD	THE EDGE	£7.95
11	(11)	KAI TEMPLE	FIREBIRD	£1.99
12	(12)	HEAD COACH (CLASSIC)	ADDICTIVE	£8.95
13	(14)	COMPUTER HITS 10 III	BEAU JOLLY	£9.95
14	(13)	HAPPIEST DAYS	FIREBIRD	£1.99
15	(9)	NINJA MASTER	FIREBIRD	£1.99
16	*NEW!*	SPEED KING II	MASTERTRONIC	£1.99
17	*NEW!*	AMERICAN FOOTBALL	BUG-BYTE	£1.99
18	*NEW!*	KONAMI COIN-OP HITS	IMAGINE	£9.95
19	(18)	ACE	CASCADE	£9.95
20	(6)	INFILTRATOR	US GOLD	£9.95

HOTTEST CLIMBERS

★ ★ ★ ★ ★ ★ ★ ★

Starglider, from Rainbird, is probably the ultimate 3D wire-frame graphics blast. It's very fast and complex. **Aliens** is the spin-off title from the film with the nasty squishy human parasites.



▲ Hot: StarGlider

▲ Hot: Aliens

E★N★T★Y

Just what we expected. Not great but it's pleasant enough. Better than most licencing deals	★★★☆☆
A graphically good but dull pot-boiler with cute characters. Predictable but well executed	★★★★☆
The best thing Ocean's done for ages. Highly imaginative plot, gameplay and graphics. Don't miss it	★★★★★
Excellent conversion from the coin-op. Inevitable hardware restrictions make the game less 'special' but it's still great	★★★★★
It's THE yuppie board game conversion. Against all odds it's a terrific effort with sound and graphics questions added	★★★★★
Superb arcade game. Smoother, faster, slicker and more challenging than almost anything else you could buy	★★★★★
Ancient platforms and ladders idea regenerated by some excellent cartoon quality graphics	★★★★☆
Essentially Spy Hunter edge-on. Great fun, easy to start and tough to complete. And it's quite addictive	★★★★☆
Could have been boring and tedious. Instead it's funny, exciting and impressive. A closet hit	★★★★★
A fine coin-op conversion. Deserves success even though the martial arts thing has been well covered by now	★★★★☆
A kick in the teeth for martial arts fans. Flat graphics and flimsy plot. A let-down even at budget price	★☆☆☆☆
A must for all sports simulation fans. If you thrilled to Football Manager then this is for you	★★★★★
Latest in Beau Jolly's ten-packs of back catalogue. Pick up on the one's you missed for under a pound apiece	★★★★☆
Wally meets Skool Daze runny, jumpy, collecty thing. Cheap but has little originality	★★★☆☆
Poor quality. Not the Exploding Fist type game it may seem. Avoid it if you can	★☆☆☆☆
Passable 3D racing game with bikes not cars. Two-player option makes it more fun. On budget it's good	★★★☆☆
Channel 4 has a lot to answer for. This Fridge simulation has naff graphics, but the tactics are good	★★★☆☆
Good value collection of Konami's Imagine titles. Nothing really brilliant, nothing awful either. With Yie Ar Kung Fu and Green Beret	★★★★★
Fine flight simulator. Not much detail to get in the way of blasting things at speed	★★★★★
A bit like being in an action film – not a brilliant one though. Arcade meets strategy meets adventure	★★★★★

Electric Dreams has turned it into a quality strategy game with arcady overtones. **Zub**, well, what can you say? It's a sort of platforms game and the play is just so simple. But it's addictive with a capital A. Cheap too

▲ Hot: Zub

Compiled by Gallup for *Sinclair User*

CHART ★ ★ ★ ★ BREAKDOWN

ARCADE

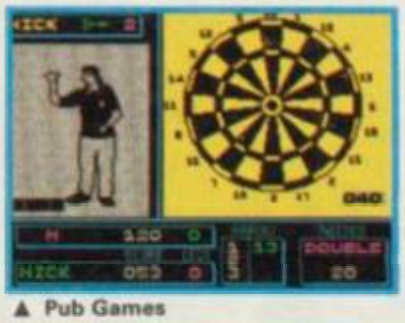
1	COBRA	OCEAN
2	THE GREAT ESCAPE	OCEAN
3	PAPER BOY	ELITE
4	URIDIUM	HEWSON
5	BREAK THRU	US GOLD

ADVENTURE

1	VERA CRUZ	INFOGRAMES
2	DRACULA	CRL
3	JEWELS OF DARKNESS	RAINBIRD
4	COLOUR OF MAGIC	CRL
5	BUGSY	CRL

▲ Uridium

▲ After Shock



▲ Pub Games

▲ Graphic Adventure Creator

STRATEGY SIMULATION

1	TRIVIAL PURSUIT	DOMARK
2	HEAD COACH	ADDICTIVE
3	ACE	CASCADE
4	GOLF	IMAGINE
5	FOOTBALLER OF THE YEAR	GREMLIN

WORK-OUT / TOOL-KIT

1	THE WRITER	SOFTECHNICS
2	GRAPHIC ADVENTURE CREATOR	INCENTIVE
3	ARTIST II	SOFTECHNICS
4	ART STUDIO	RAINBIRD
5	WHAM! THE MUSIC BOX	MELBOURNE HOUSE

BUDGET

1	OLLI AND LISA	FIREBIRD
2	180	MASTERTRONIC
3	KAI TEMPLE	FIREBIRD
4	COMPUTER HITS 10 III	BEAU JOLLY
5	HAPPIEST DAYS	FIREBIRD

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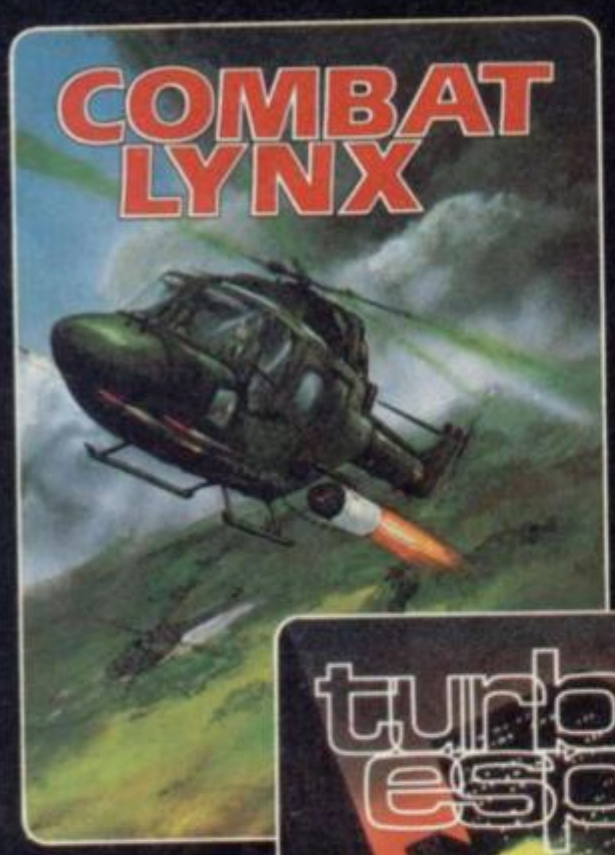

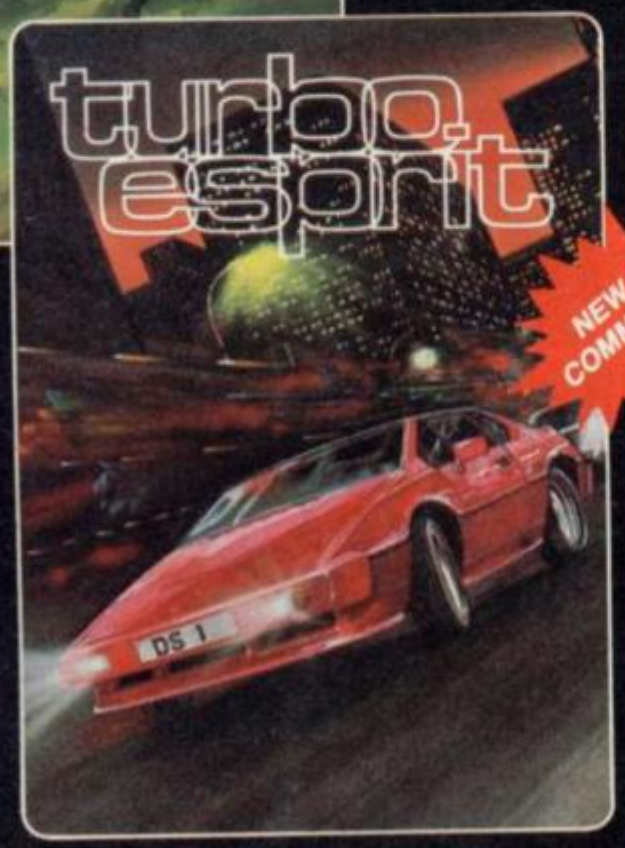

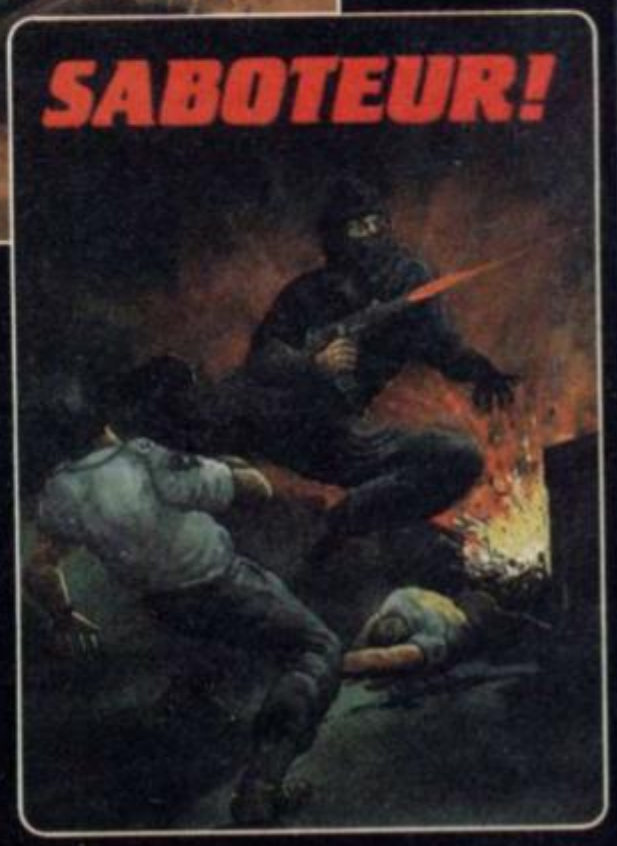

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software getting harder . . . .

TRIAXOS

Spectrum in October, **Amstrad** in November, **Commodore 64** in December. All £9.95

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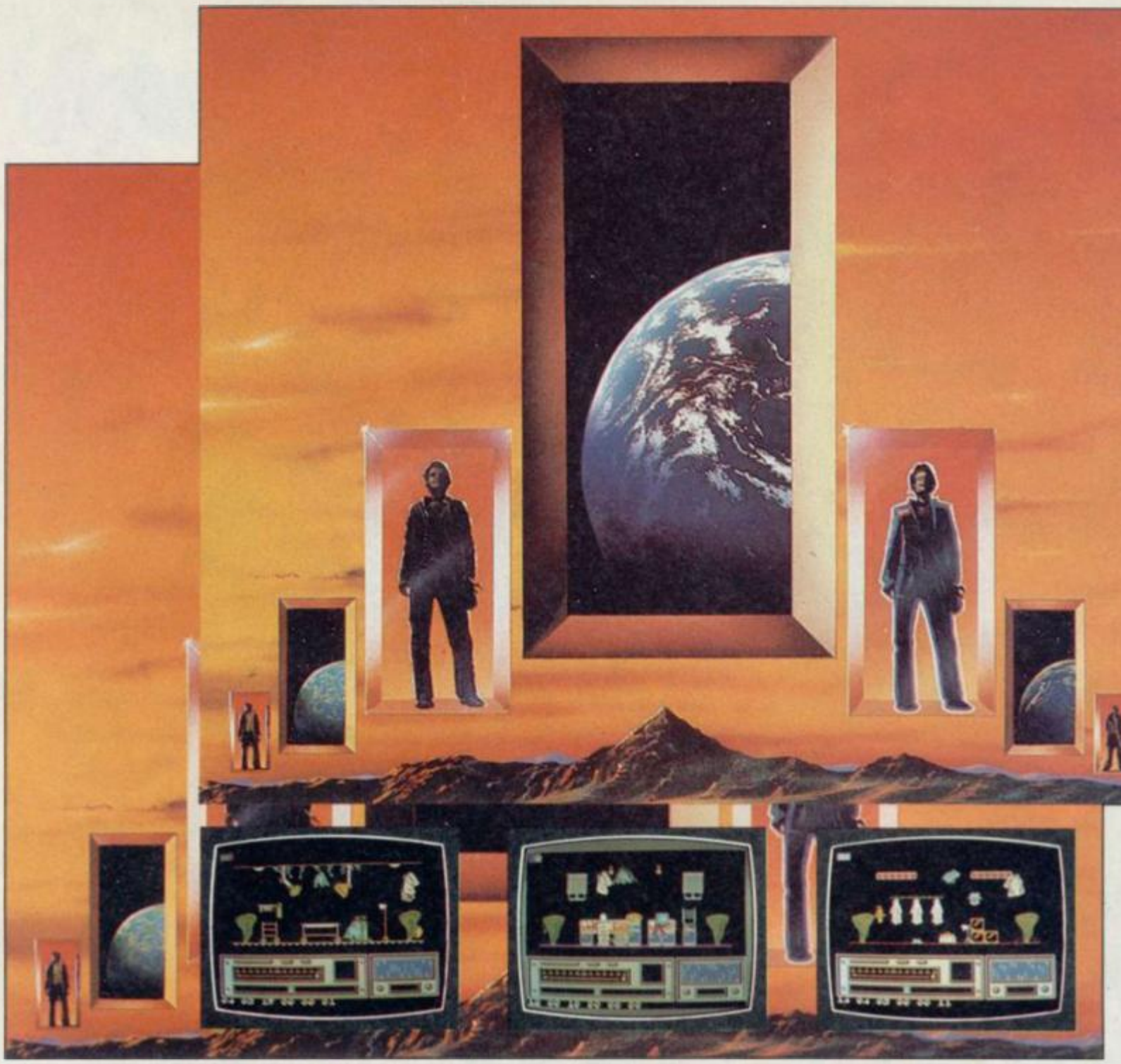
software getting harder . . . .



T wo worlds – the mirror image of each other, touch in space through a Time-Warp.

O ne is positive, good, familiar – our World; the other is negative, evil yet unnervingly familiar.

T heir interface – a time window through which objects and beings can pass; contact has resulted in the beginning of exchange.

R estore our World – stop the invasion, but do it now, for as the exchange accelerates, the time window grows larger – domination is a hand!

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LETTERS

Your rights – guaranteed

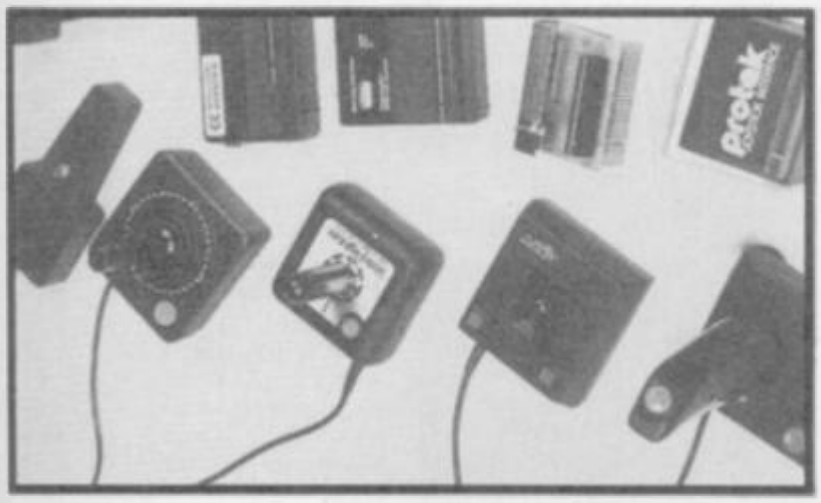
As postscript to your November issue's report on joysticks, I would like to remind buyers to check the guarantee card before they buy.

Many shops offer only a very limited guarantee and as it is essential to make sure you are protected by the manufacturer. Beware of devious clauses that seem to allow the manufacturer to opt out of a free repair by imposing certain conditions on the buyer. Cheetah Marketing, for instance, requires you to write them a letter within 10 days of purchase if you want the guarantee to become effective – a hard thing to do if you have received the joystick as a present!

So, please check very carefully what you are buying – not only the hardware but the paperwork too.

B L McCorkell
Moray, Scotland

● *What you say is partly true but these guarantee arrangements are in addition to your statutory rights which are that anything you buy must be of merchantable quality. If it breaks after the third game it wasn't*



Please Mr Poster

I like posters of computer games and have posters which include **Tau Ceti**, the Gremlin Xmas Bash poster out of SU and so please, please, please could you print some.

I think a lot of the other readers would like a computer game poster every so often in the magazine and being a great game, the **Way of the Tiger** would be a good one to start.

On **Way of the Tiger**, I can master the Unarmed Combat and the Pole Fighting but I can't master the Samurai Sword Fighting.

Richard Cross
Dumfries, Scotland

● *We'll run it up the flagpole and see who salutes it*

Now it's in gear

What has happened to SU magazine? I was a regular reader. I cannot understand the language it is written in. Perhaps it is geared to 15 year olds.

R W Miles
Petts Wood
Kent

● *Perhaps it is just geared.*

That's our story...

I have spotted a printing mistake on page 105 of the Sinclair User magazine which I purchase each month. Enclosed is a copy of the page and marked on it is the mistake.

I am 12 years old and I enjoy reading the magazine.

Yours truly

Kenneth Little
Hamilton

● *Thank you Kenneth. You mean that's the only mistake you could find? There were at least twenty others (all deliberate of course).*

Nice people's address

Ref the **SMART GUIDE TO XMAS BOOKLET** with the latest issue of SU – I am interested in the Alphacom 32 Printer on Page 16, but can find no phone number or address for those 'nice people at WAVE Mail Order'.

Leslie Lee
Twickenham, Middlesex

● *For you and the 3,000,009.7 other people who wrote in: Wave, 53 Shear Water Crescent, Barrow-in-Furness, Cumbria LA14 33P.*

Drawing the line

I used to buy your magazine regularly and then changed to *C*****h*, but since they began catering for the under fives and included primary school drawings in their pages some months back, I have not bought a single copy. I was very pleasantly surprised to find a new look to SU so now you've won me back. (Aren't you pleased?!)

Gremlin is my favourite feature, (the Amstrad CD joke was excellent), followed closely by the *Hewson Helpline* and *Sinclair Surgery*.

One small criticism. In common with other reviews, your software summary includes "48/128K" regardless of whether the software is 48K only. I find this rather misleading; confusing even! If the programme *is* 48K, then perhaps you could just state 48K, as owners of 128 machines don't need to be told it is compatible. Having just upgraded to a 128K+2 I would personally prefer to see a revised method whereby reviews state either 48K or 128K and if there are two versions on the tape, then indicate with '48' and '128'.

SU is the best! (This pen is garbage – I'll chuck it when finished)

D Kosmos
Rickmansworth, Hertfordshire

● *Ta very much. Your point about 48K/128K is noted but we're not happy with the alternatives we've come up with either – we'll think of something*

Global village calling

I am a 14-year old Spectrum Plus owner. I have (in my opinion quite a good collection of programmes, pokes, maps etc....

I would like to exchange software with a boy or girl of my age.

JAKUB JINCEK
Sullysova 47
16900 Praha 6
Czechoslovakia

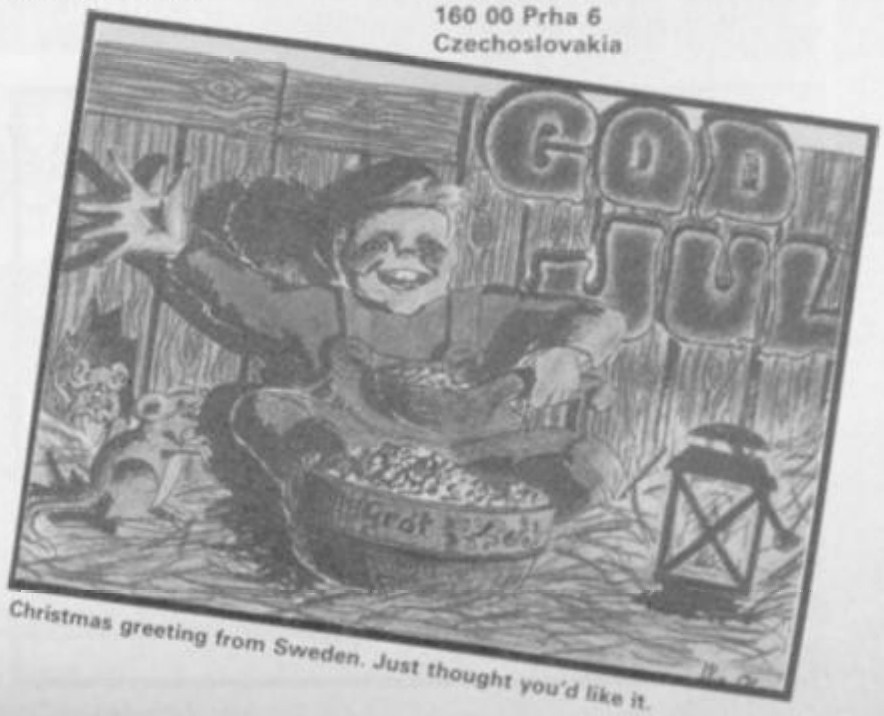
I am an 18-year old boy and own a 128K Spectrum. I would love to swap programs, games, ideas and tips with anyone! Please write to me at this address:

Adar Weidman
Melchett 59
Tel Aviv 64287
ISRAEL

I would like, if you can publish the following letter in your magazine SU

Hi! I am a 15-year old boy from Czechoslovakia. I own a 48K Spectrum. I would like to have a penfriend to exchange programs, ideas and games.

Mark Novicky
Muchova 13
160 00 Prha 6
Czechoslovakia



Christmas greeting from Sweden. Just thought you'd like it.

LETTERS

Autofire answer

Any of your readers who own a Spectravideo Quickshot II joystick will know that there are many games on which Autofire does not work. The reason for this is that inside the joystick is a 555 chip which is supposed to provide switching off the fire signal. However this chip will not work because it has no 5 volt supply to it. I have modified my joystick to provide a supply to the chip and so far I have found that autofire works with every game I have tried.

This modification can be performed by anyone who can handle a soldering iron, the only parts required being a length of 8 core cable and 9 pin D socket. (These are available from Electrovalue, 28 St Judes Road, Englefield Road, Egham Surrey. This will of course invalidate the guarantee.

First remove the 4 cross-head screws securing the base of the joystick, unsolder the two wires from the fire switch and remove the PCB from the base. Next disconnect the 6 connectors and remove the cable, remove the surplus solder from the PCB connector marked "TOP". Cut the tracks on the PCB at the points marked X on the diagram and join the points marked A and B with a short length of wire.

The next step is to connect the cable as shown in the diagram. Next re-assemble the joystick.

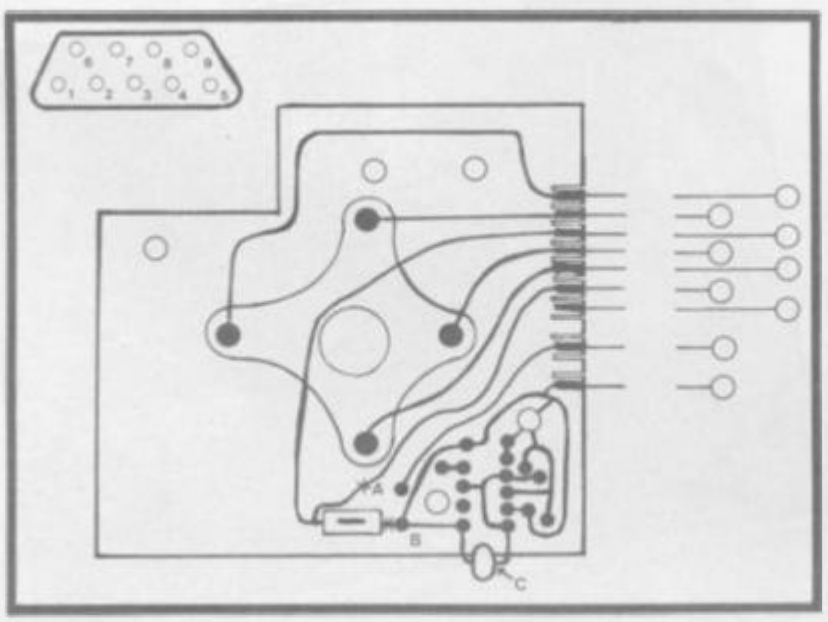
The next stage is to connect the +5v supply to pin 7 of the joystick plug on the interface. Some interfaces eg Protek switchable joystick interface already have this pin connected and also have the common connection (black) connected to 0 volts. In which case it is not necessary to cut the tracks in the joystick, but note that if you wish to use the joystick with other interfaces as well eg Kempston, the tracks must be cut.

Finally connect pin 9 on the joystick interface to 0 volts and re-assemble the interface.

If you find that the rate of fire with this modification is too fast you can slow it down by altering the value of the capacitor inside the joystick (marked C on the diagram). I changed the value of mine to 0.1 μF and this gives a satisfactory result, but this is a matter of personal preference and it may be worth experimenting with different values.

Good luck and good shooting.

Paul Darke
Camberley



Bloody hell!!

I'd like to complain about your use of obscene words used in the December issue of your so called computer magazine, it was more like a pornographic rag. I bet a hell of a lot of other people would agree with me. When I say obscene I really do mean obscene, your use of words such as "Bloody hell", printed in the absolutely diabolical 'The Write Stuff' was bad enough but when "Damn" was mentioned it had gone too far.

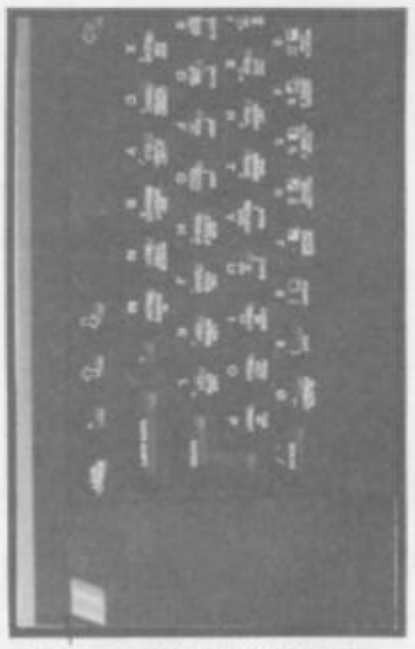
I am a father of two and before they bought your worthless rag their minds were clean but now they are filled with filth. As a Catholic I have brought my children up as decent human beings but you Sinclair User have ruined their espect for others, shame on you.

Yours in rage

Gilbert Lenson

● *Well we read this one over and over and couldn't decide if it was a joke or not. Why is 'Bloody Hell' worse than 'Hell' as is (a hell of a lot and what's wrong with 'Damn' – it crops up a lot in the Bible as 'damned' as I recall. You really do mean obscene but I'm afraid you don't understand the word. Finally, where's your address Mr Lenson? You didn't put it on the letter, ours is at the front of every issue. Next.*

128K+2 probs



Here are a few questions I would like to ask you about the Spectrum 128:

1. When you write your reviews you often put Memory: 48K/128K. By this do you mean there is a separate version for the 128, or do you mean that it will work on the 128 in 48 mode.

2. I own a Serial 8056 compact printer, and am wondering what is the best word processor available for the 128.

3. Since I own a Spectrum 128 I am dying to get my hands on the Spectrum+2 handbook, can you tell me if this is possible and if so how much it will cost.

Simon Robinson
Kettering

● *Here we go:*
1) It means it will work on both
2) Hard to say, try ***The Writer*** *from Softechnics or* ***Tasword*** *from Tasmann*
3) No idea, try Amstrad direct but don't get your hopes up – 0277 228888

Star purchases?

If I was to buy each game that received the five star award in the December edition, I would have to pay over £150. To go straight to the point, SU's system of reviewing needs to be changed. A mark out of five, compared to a mark out of 100 is terrible.

I see SU has tried to brighten itself up. I feel it would be too much to ask of SU to have a colour page for each 5 star, so called Solid Gold Game, 15 of them in the December edition.

Sold Gold, buy it, you say, of the 5 star games, this would be alright if I had £40 pocket money a week. I suggest changing the five star system altogether, and having at least a mark out of 50.

Ben Payton
St Austell
Cornwall

● *It just depends on what comes in, this issue there are hardly any classics. As for colour – sometimes there are classic games that just don't require colour*

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SOFTWARE PROJECTS

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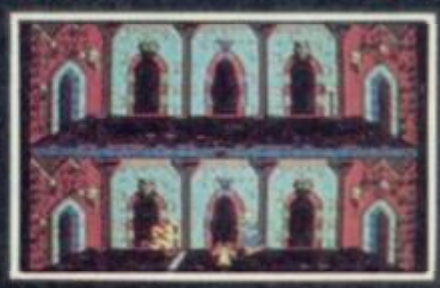

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GAUNTLET

Well, here we are then, the real thing.

After **Dandy** and **Druid** the **Gauntlet** surrogates, we have **Gauntlet**, the Official Licenced Version.

Both **Druid** and **Dandy** were good games (and **Dandy** particulrly a very adequate **Gauntlet** substitute) and both were released around two months before this one. Does it stand a chance? Do you need to buy it? I'd say yes.

Things begin badly however, for various reason, when you're setting up right at the start. Partly because of Spectrum memory restrictions and partly because a **Gauntlet Expander** tape is planned in the next few months (US Gold needs to get some of that money back somehow) you have to keep stopping and starting the tape, making selections, number of players, which character you want to be and so on and then restarting the tape.

Worse. During the game after every eight levels or so you have to restart the tape to load in the next batch of levels. You'd beter hope you don't get any problems with the hyperload...

Is it authentic? Yes very, although the graphics are simplified compared with the arcade original.

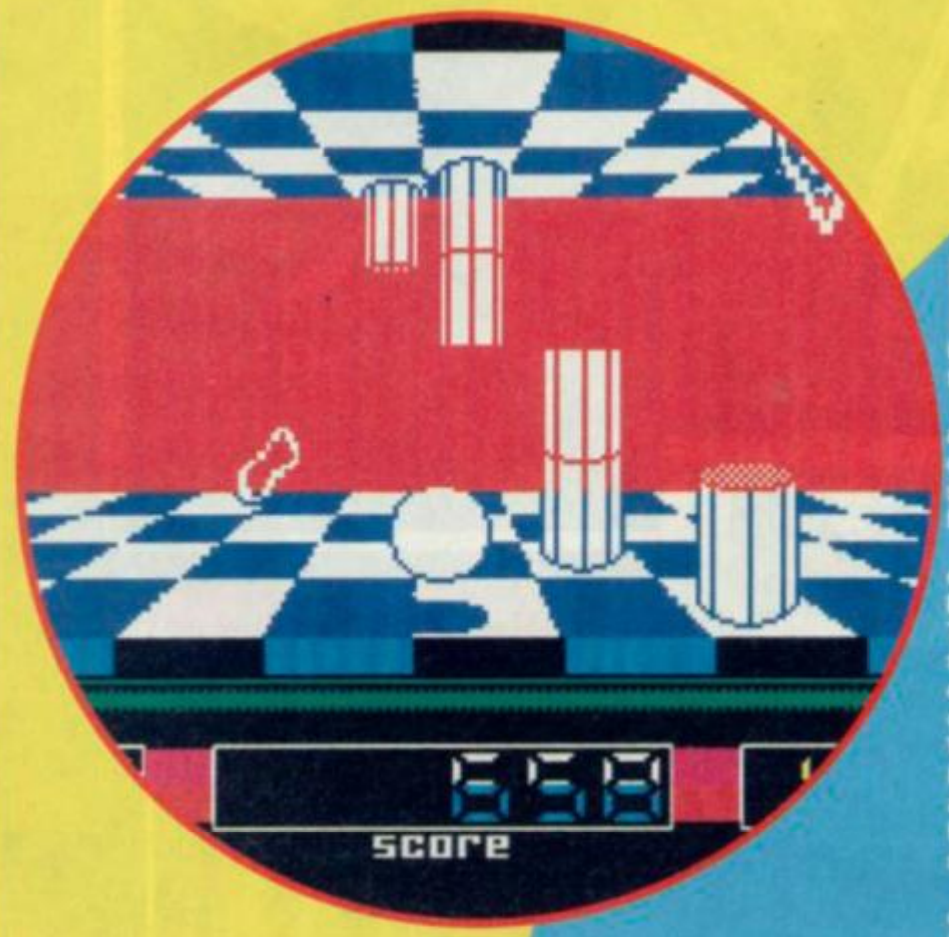
A good many of the mazes are exactly the same in layout as on the machine. I was very pleased to discover that one of my favourite sections, where a great mass of ghosts crowd the doorway just waiting for you to open it, was retained almost exactly. The shapes of the ghosts, the food supplies, the bottles, the bags of gold, all are retained from the original.

Better still, the gameplay is such that you can make use of strategies developed at great expense and over many hours on the arcade machine. As ever the monster generators are the key – get them first – and on some levels its definitely more feasible to go treasure hunting than others. Other times it's

HINTS AND TIPS

- **Choose a well defended character if you are new to the game, eg Thyra (if you can bare to play a woman) or Thor**
- **Don't rush out the nearest exit on Level 1. There are reasons to investigate locked gates...**
- **Shoot monster generators first**
- **Don't always try to kill all the monsters in the vicinity. If the way is fairly clear and you can run past, do so**
- **Be careful not to shoot food or treasure**
- **Watch out for poisoned food**

IMPOSS



Impossaball, aside from being a terrible name for anything, is the unfortunate title bestowed upon the latest game from Hewson.

Apparently, the program's author wished the game to be called Atomsphere (an infinitely superior name) but it was not to be.

Like so many astonishingly enjoyable things in life, **Impossaball** is really simple. The aim of the game is to guide the ball you control through eight levels of absurdly difficult obstacles before, before what? Well, I haven't a clue. The first level is tough enough to keep anyone busy for a good few hours, and as for the eighth – I shudder to think!

Each level, aside from the different layout of obstacles, has the same aim. You must race from one end of the course to the other before the time runs out. Obviously, things would be just too simple left at that. Dotted along the floor and ceiling of the corridor down which you are travelling are cylinders. Each cylinder must be depressed – by landing on it – before you can move to the next level.

The graphics are simple but extremely effective. The screen is presented side-on in real 3D. A chess-board pattern covers the ceiling and floor, adding to this illusion but the best effect is you can move into the screen by pushing the stick forward, and out by doing the opposite – and the ball swells and shrinks accordingly.

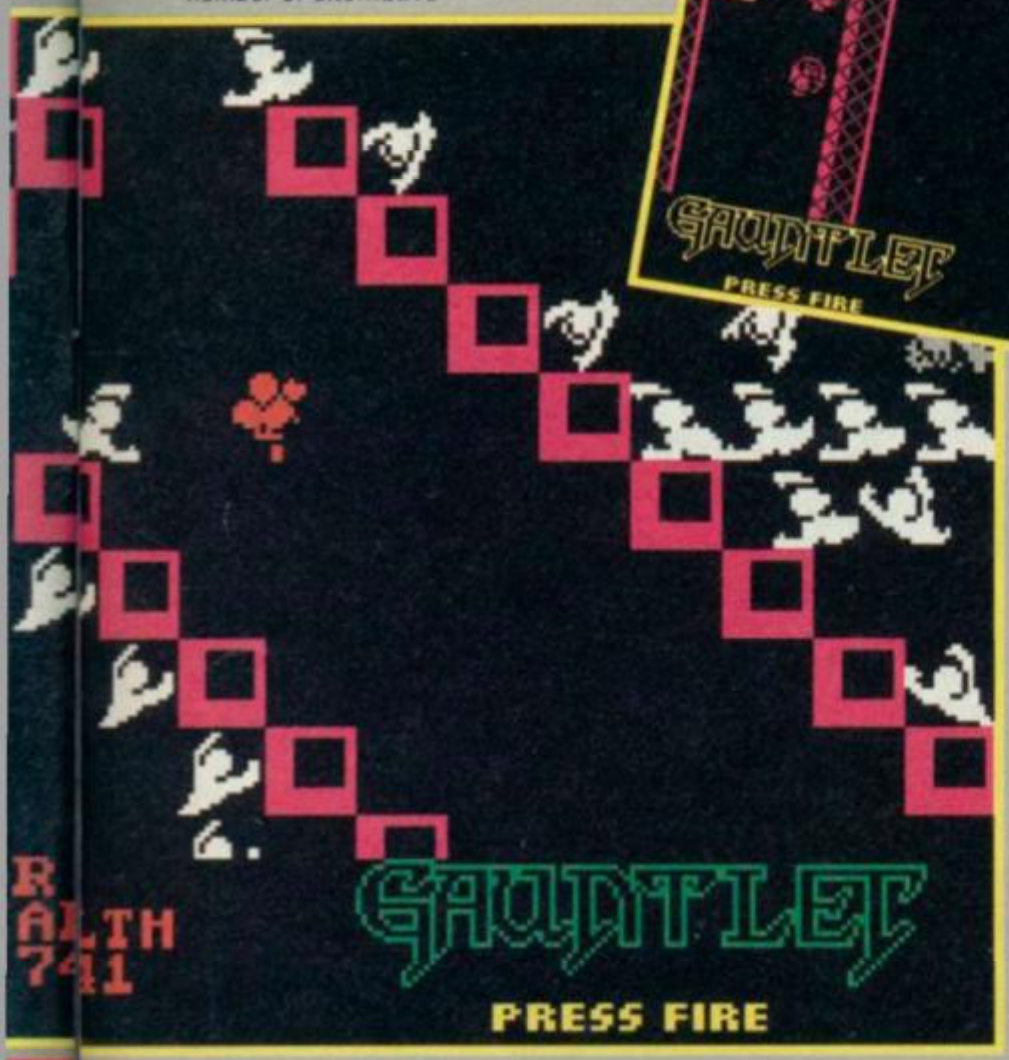
Once you have moved past the start (which looks like two ladders in fact) the time will begin to tick away, and you'd better get your butt in gear (man).

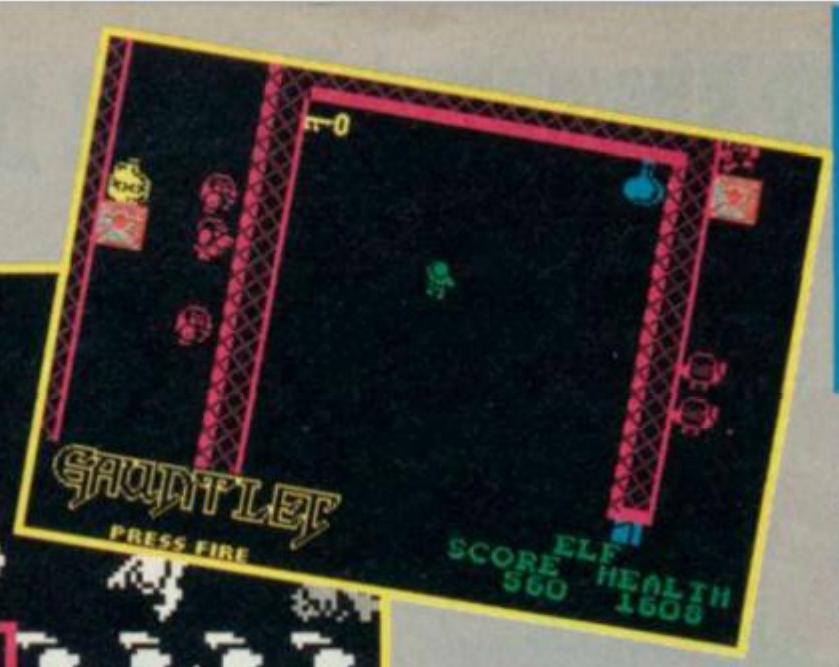
Accelerating by pushing the stick to the right, the ball skitters along the ground at satisfying speed. Obstacles can be jumped by hitting the *Fire* button. The longer you depress the button, the higher you will jump. It's all great fun – and very frustrating at times.

Some of the more unpleasant items you will encounter are the

better to head straight for the exit just as fast as possible...

Like the original, it works best as a two-player game and the program provides for a large number of alternative





ARCADE REVIEW

arrangements for keys and/or joysticks so that the whole thing becomes logistically feasible.

The choice of characters at the beginning is the same. There's Thor who's like Rambo – tough but lacks the noddle to cope with spells. Thyra is pretty good at everything except shot power. Merlin is butch but is good at the magic stuff. And Questor who isn't much of a shot and can't take much punishment but is good at everything else. Well defended characters are probably best for beginners.

How does it rate? Personally I still prefer **Avenger** as a marginally more complex game but if you are an addict of the arcade game, and who isn't, I think even **Dandy** owners might not be able to resist it.

It's actually about as good a conversion as it could reasonably be hoped for. A relief for **Gauntlet** players everywhere■

FACTS BOX

As good a conversion of the classic arcade original as could be expected. No-one should be disappointed

Label: US Gold
Author: Gremlin Graphics
Price: £9.95
Memory: 48K/128K
Joysticks: various
Reviewer:

Reviewer: Graham Taylor

★★★★★

SABALL

spikes. Invariably surrounding a couple of cylinders, these critters simply sit there, waiting for you to hurl yourself on to them. Sounds like a very unlikely thing to happen? Wait till you play the game.

Also joining the ranks of the undesirables are plasma fields. These little blighters wibble about all over the place, getting into all sorts of unhelpful positions and being a general nuisance.

Magic rings are very temperamental beasts too. One minute they are happily giving you extra time whenever you land upon them. The next and – whammee! They kill you without so much as a by your leave.

You can alter the direction of your ball in mid-air, but you will need to have a fair degree of deftness with your stick in order to make use of this feature.

Gameplay is fast and furious. The graphics are simple but you really get the impression of movement as the squares on the floor zoom past. The bouncing of the ball, too, is very convincing.

Impossaball is a very good game. It's so frustrating, but equally addictive. Something similar has been attempted before in other guises, but Hewson has made the best attempt yet■

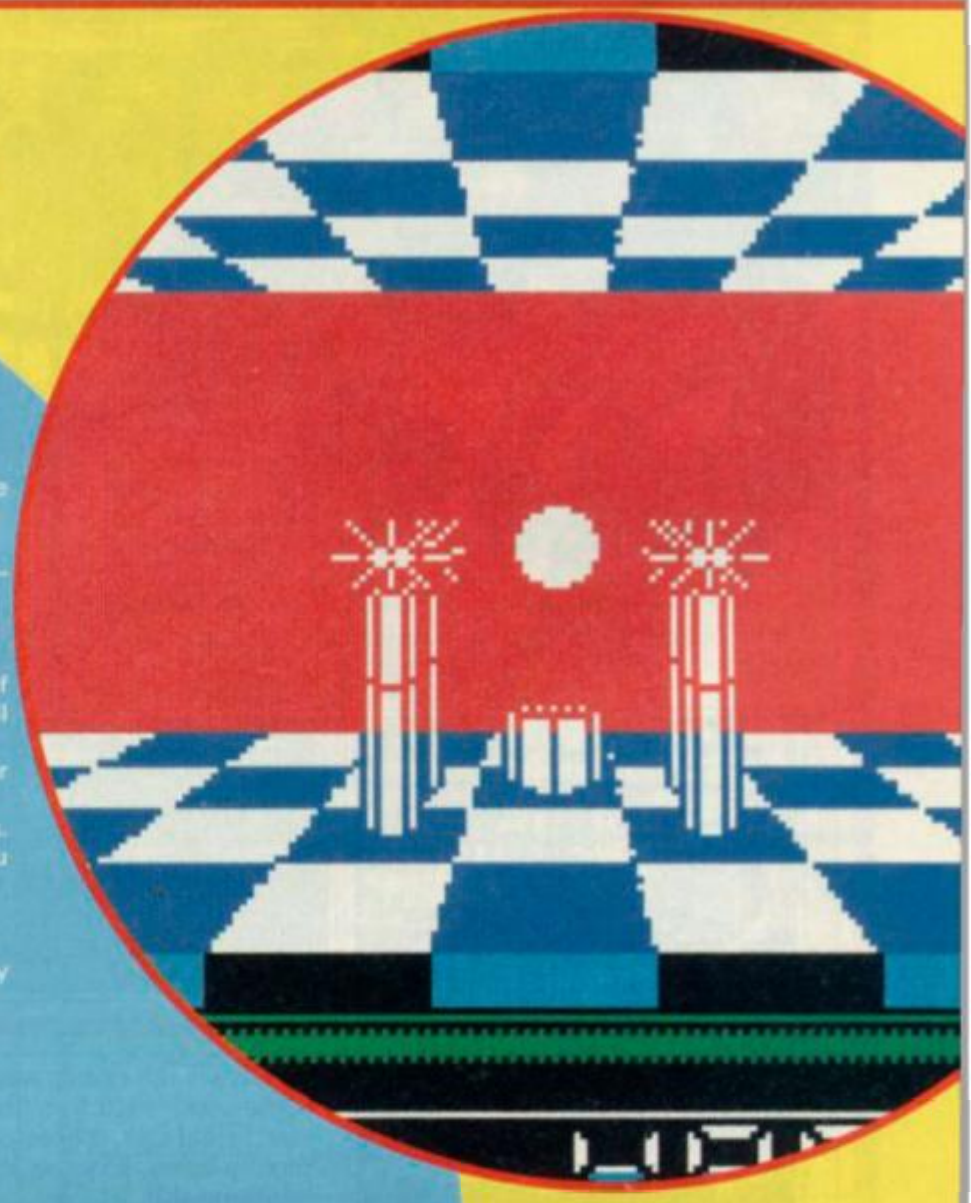
FACTS BOX

It's fun. It manages to stand up as high-quality game that has more entertainment value than most

IMPOSSABALL
Label: Hewson
Price: £7.95
Joystick: various
Memory: 48k/128k
Reviewer:

Reviewer: John Gilbert

★★★★★



THE COIN-OP SENSATION FROM DATA EAST...

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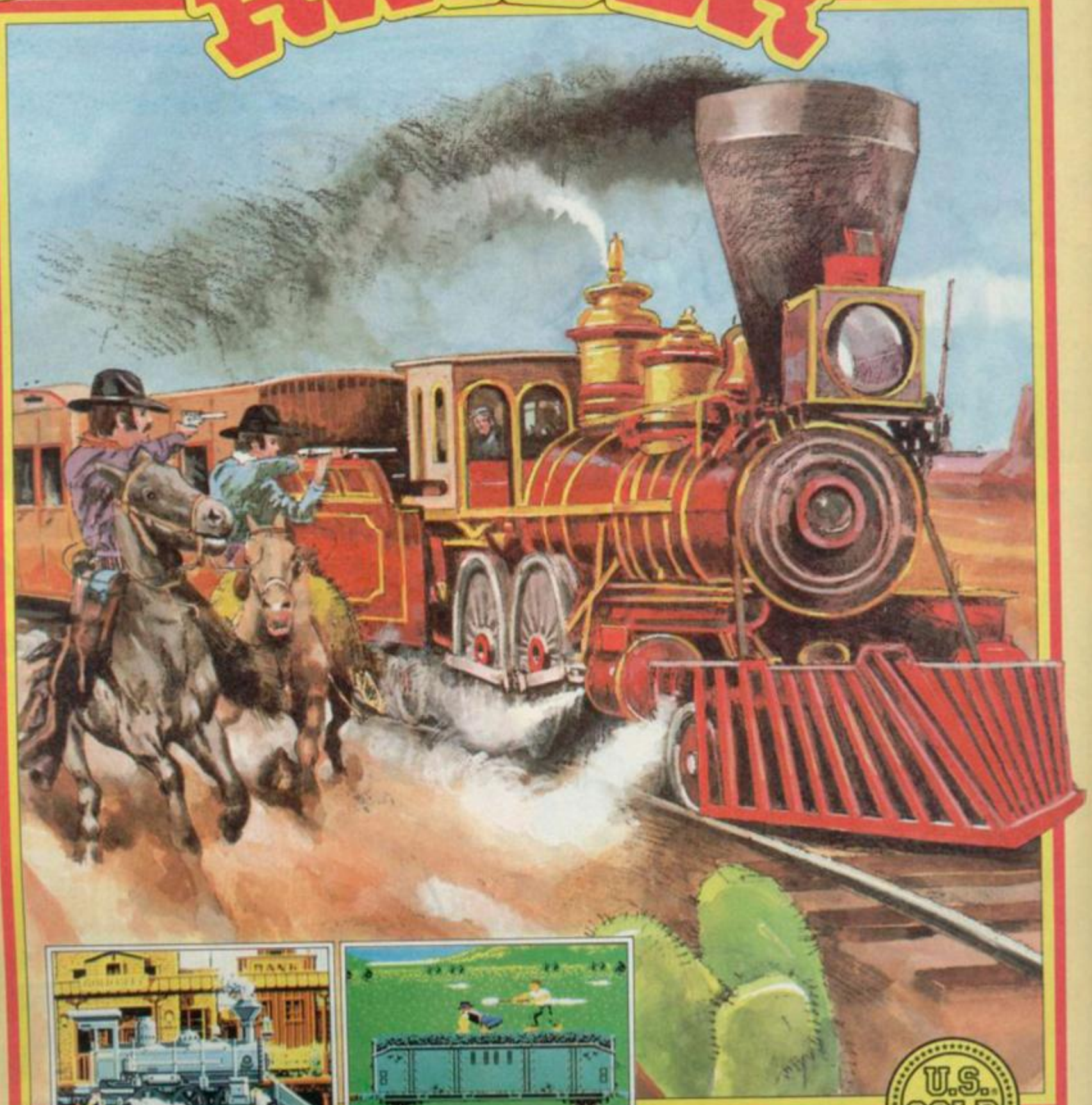
DATA EAST

EXPRESS RAIDER



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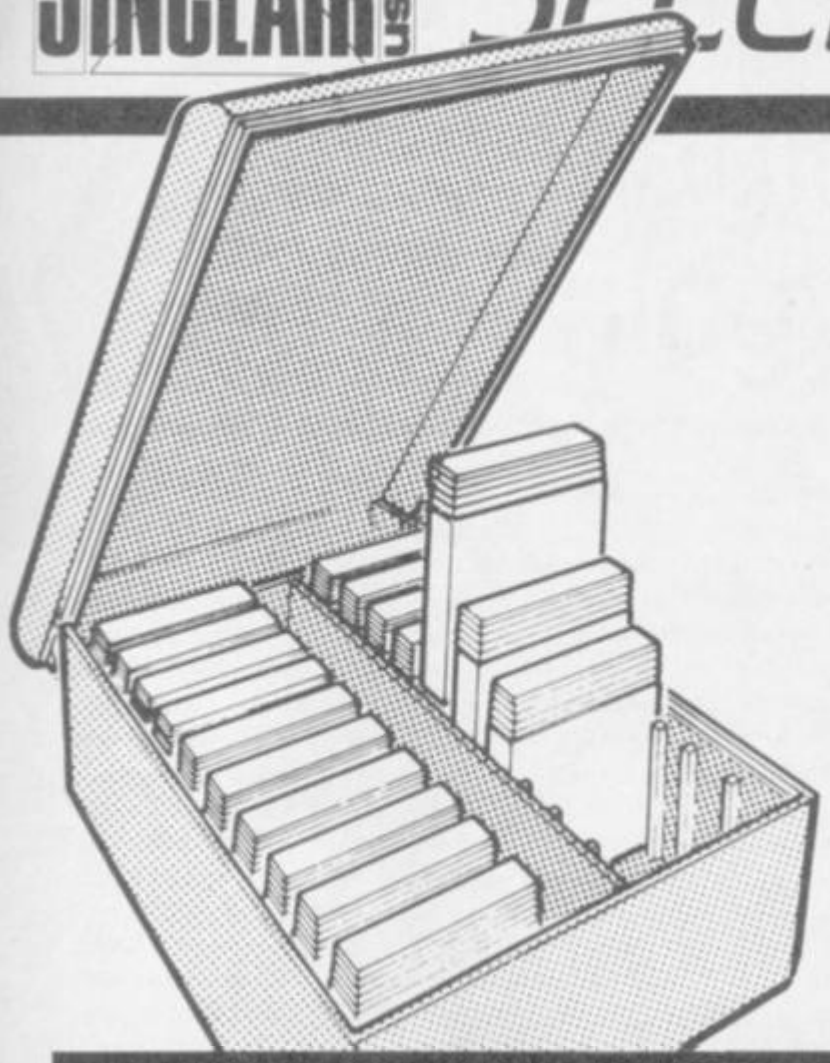

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Microdrive cartridges are such amazing things, in fact, that they are in great demand. Many a-time have the SU staff strolled into well-known high-street store with a view to picking up a couple of cartridges, only to be told that they had all been snapped up by Mr Noggin three minutes before.

In answer to such problems? Why, it's simple. Just fill in this coupon and send it to the address below.

And an almost unlimited supply of cartridges is not the whole story either. Transform (with whom we're doing the offer) are packaging the cartridges in snazzy plastic boxes. For a box of 10 you pay a mere £17.95 and a box of 20 will set you back a paltry £32. Each cartridge can store 100K of Spectrum code.

Make cheques payable to Transform Ltd, and send them to Sinclair User/Transform Offer, Priory Ct, 30-32 Farringdon Lane, London EC1R 3AU. Offer closes February 20th.

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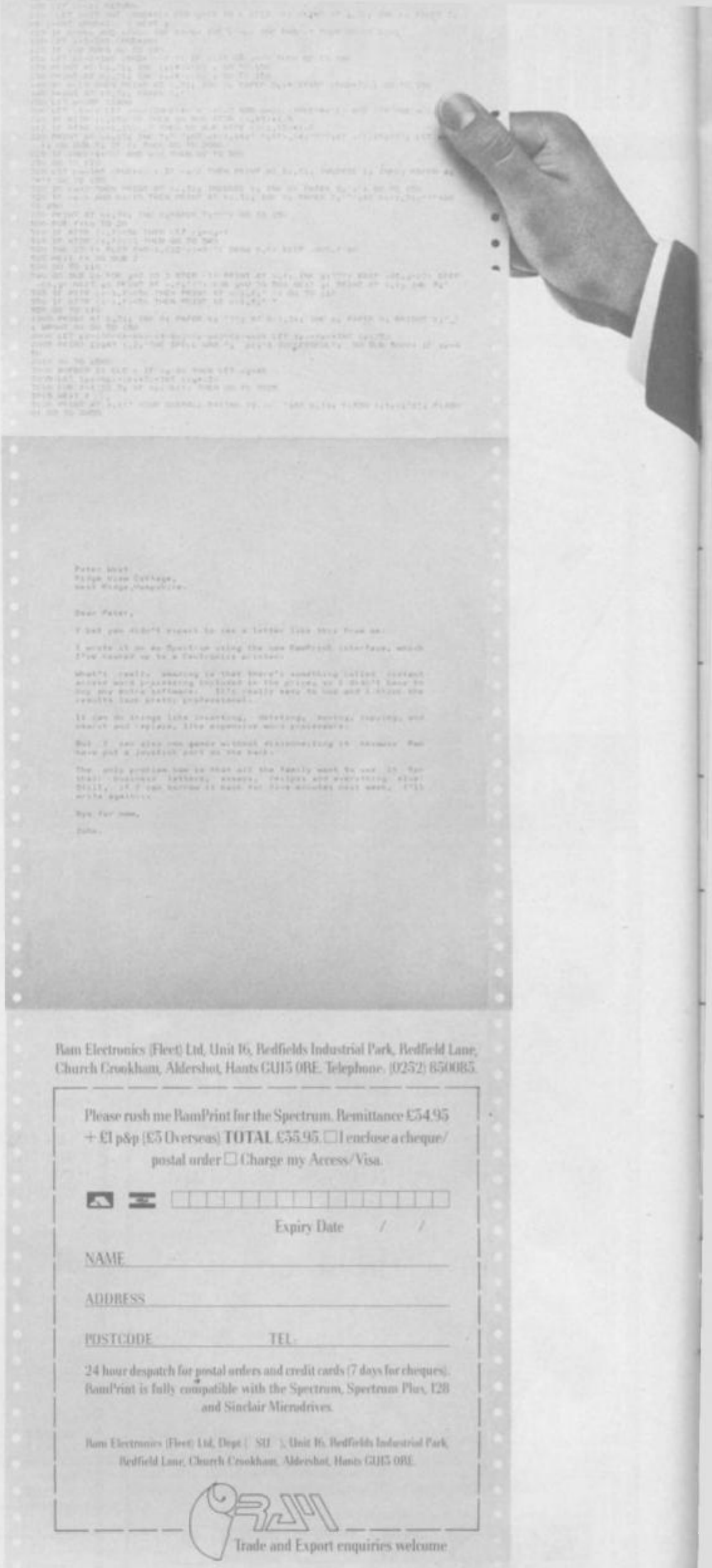

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RAM

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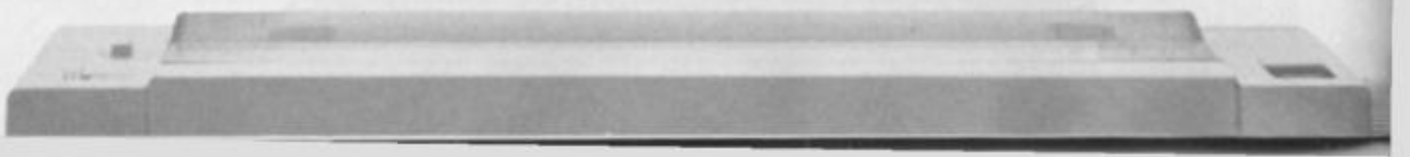


SINCLAIR user

COMPETITION

Win the Magic Knight Trilogy

Okay, here it is – SU takes another step into the realms of leisure-time expenditure.

In conjunction with Mastertronic software, we can offer you an entire entertainment package.

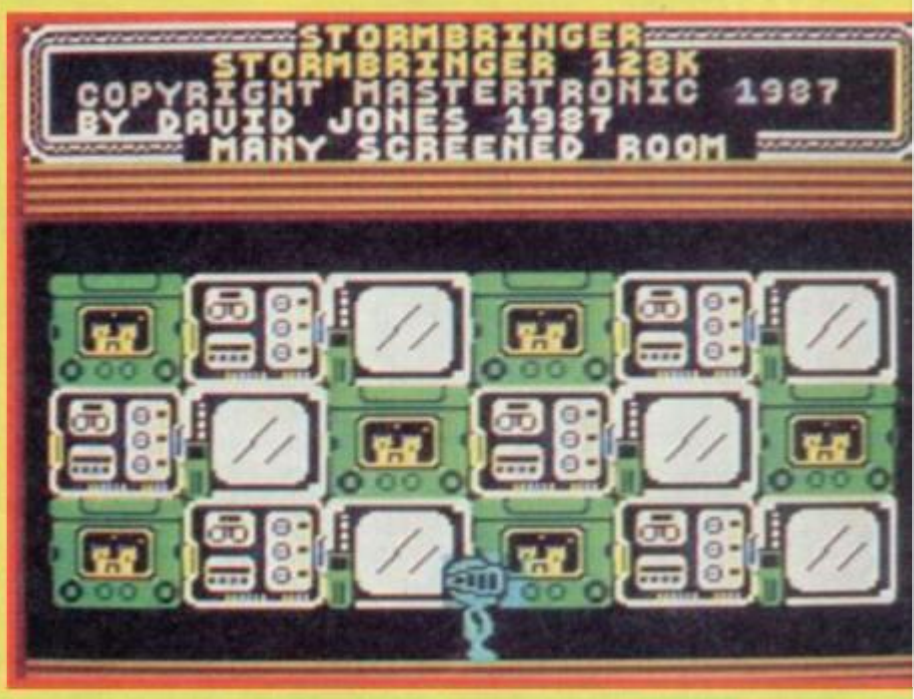
With Stormbringer **(previewed this issue) at last included in the Magic Knight series of games, we've decided to celebrate the passing of an era of game-design history with a splendiferous competition for every discerning game-player.**

Ten lucky winners of the ludicrously easy competition will win not one, not two, not even three games but THE WHOLE SERIES!!

Yes, you could be the proud owner of the complete set of Magic Knight programs (A history buff writes – Quite an impressive collection, in fact. You can now trace the evolution of the ancient Knight through the mystical lands of Finders Keepers, Spellbound, Knight Tyme **and** Stormbringer.**)**

AND... Everyone knows that playing games can be a frenetic and violent business. Many a joystick has been waggled to death while trying to time those fiendish jumps and jerks necessary in these games. Therefore, what better idea than to include a fresh-out-of-the-packet Mastertronic Magnum Joystick!!!! (Can it be true?)

More! If you're really lucky, we might just see our way to getting some Magic Knight T-shirts for you to wear while you play the game. See? A complete entertainment package, free of charge and very exciting indeed



WHAT YOU HAVE TO DO

- Fill in the missing word which can be used with either word below:
  Silent ..... Watchman.
- What was the final act you had to perform before completing Finders Keepers. (Tricky one, that) .....
- Which part of the anatomy is protected by the Gauntlet in a suit of armour? .....

Closing date for the competition is March 13. Answers on a postcard or battle-axe or something to Sinclair User, Magic Knight Competition, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU. Fill your name and address and T-shirt size on the coupon below:

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Emap and Mastertronic employees get to miss out on this one (again)

SUPERSOCCER

Well, Ron, it was like this... I was approached by the manager up at Manchester who says to me, "Imagine the most realistic computer soccer game ever. Would you transfer?" Naturally, I was interested...

Super Soccer can easily lay claim to comprehensiveness. Pre-match there are all those managerial decisions to take – like the length of the game, its difficulty and whether you'll practice, play a single game or go for the cup in Tournament mode.

If you choose the latter, you'll find youself drawn as one of the eight teams at the quarter finals stage of a knockout competition, which means that up to eight people can play – though if you're on your own the computer will still generate scores for the others.

Then there are problems that Cloughie never even dreamed of, such as choosing a new name for the team or altering the colour of the strip, the pitch and even its border.

When you've re-decorated the stadium to your satisfaction, it's out on to the astro-turf and into the game. And this is where it really gets complex because, as well as the usual features, such as running and tackling, Imagine has added a host of new refinements.

Even jogging around isn't quite the simple matter of point the joystick and go. Pushing it in any one direction accelerates you and to slow down you have to pull back on it. A sideways move turns you through a right-angle, bringing you to a skidding halt, while turning to one of the intermediate forward positions curves you through 45 degrees but you keep on running.

This gives you a sense of momentum as you swoop down the wing, and you have to make gentle turns rather than darting about like an angry wasp. Keep an eye on your speed as well, because not only does a fast run mean that you're in contact with the ball for less of the time, but you'll also tire yourself out. An energy meter, at the top of the screen, warns you when it's time to sit down and suck another orange.

Kicking is almost as complex. Another bar indicator shows how much welly you're giving the shot, and this is increased by holding down *Fire*.

You can also choose the type of kick.

Pulling straight back gives you a chip, while crosses are achieved with a backwards and sideways movement. Free kicks and throw-ins give even more directional control, with low straight drives, lobs and three types of chip (straight, crinkle-cut and greasy?) That's the theory at any rate, but in practice... well, let's just say it takes a lot of practice.

This is the first footie game on the Spectrum that allows for fouls, as far as I know. Your players can be booked and even sent off for the odd sliding tackle that makes contact with opponent rather than ball.

When a free kick or a corner occurs you switch to an overhead plan of the pitch, and you have 30 seconds to manipulate your men.

According to the instructions they can go anywhere, but I kept finding that my lazy team was limited in how far its members would walk.

Finally there's that vexed question of control. Even in a seven-a-side game, you can only guide one player at a time.

Imagine has hit on the unique method of indicating which one by giving your chosen man a halo, which adds a whole new meaning to The Saint, doesn't it, Greavsie?

It's a good clear system, and the rest of your team also behaves logically, running with the ball and trying to get into useful positions. There's even been an attempt to let you select which player is blessed with your attention. When nobody is in possession *Fire* transfers the celestial hula-hoop to the next man in line.

The system still isn't quite smooth enough for my liking though. It's annoying when two men are almost equal distances from the ball to find control switching from one to the other while your opponents swoop in.

Ball control is difficult, too, and the complexity of the program seems to have slowed down the on-screen action a little so that the teams appear to be running on treacle.

In the end I can only admire the ingenuity that's gone into **Super Soccer**, and praise its innovations. But I have to regret that for me, it just doesn't quite come off■

FACTS BOX

Nice try, Jimmy, but unless you're prepared to spend time training you'll never make it out of fourth division

Label: Imagine
Author: RCD/DJ Anderson
Price: £7.95
Memory: 48K/128K
Joystick: Kempston, cursor, Sinclair

Reviewer: Jerry Muir

★★★★☆

HAND MARA

It's like this boss ... they achieved mid-field dominance, culminating in a crescendo of attacks and a goal-riot I was powerless to prevent.

Or in footballing parlance: 'We wuz stuffed.'

FACTS BOX

Taking into account goalie isn't exactly the most action-packed position the games turns out quite well

HANDBALL MARADONNA
Label: Grand Slam
Price: £8.95
Memory: 48K/128K

Reviewer: Terry Pratt

★★★☆☆

FOOTB

The British-born goal ace topping the Superleague's scoring charts has walked out on Juventus.

Terry Pratt (affectionately dubbed El Tel by unimaginative

DBALL ADONNA

There's enough soccer action on this page to keep John Motson in clinchés for a month.

Whether you end up over lunar objects or as unwell as an exotic species of avian depends on which game you support this New Year.

There's something for goalkeepers, award-hungry strikers or those old fashioned play-anywhere utility players.

But even if you love footie, remember, the spectre of World Cup Carnival ***still haunts the terraces***■

ARCADE REVIEW

The impression I took away from **Peter Shilton's Handball Maradonna** was that Argus had a game idea waiting for a suitable controversy to give it life – whether we should consequently be happy that England had such a contentious exist from the '86 World Cup is doubtful.

Goalkeeper is not the most glamourous position on a football pitch and the game suffers from the inevitable fact that the action happens *to* you rather than around you.

Having accepted, then, that better games subjects have been chosen, it is only fair to add that **Handball Maradonna** is still a worthy attempt at appreciating soccer from the 'keeper's point of view.

You control the keeper bouncing on his goal-line as action unfolds before him. Without fail the defence contrive to present the opposing forwards with scoring

opportunities – and these guys (Ian Rush's to a man) are always on target.

You can move left and right, come forward to narrow the angle, jump to save or dive in one of six directions: high-left, low-left, centre-left and vice versa.

Be in the right position and correctly read the shot and you save it. Miss and the scoreboard bleeps up, 'goal'.

The animation of the white figure on green is fine (if slowish) but there's no getting away from the fact that you perform one act in every 20 seconds.

What earns this game its stars (three is uncommonly high from this reviewer-Ed) is that the build-ups are well animated, entertaining and above-all, realistic.

Pin-point headers from corners, viscously curving free-kicks, deadly penalties and

dipping volleys rain in as the defence makes itself absent and relies on you (Shilts) to do your stuff.

You pick a team, practise, play games, try and improve your skill rating and it all takes place with the same white-shirted Linekers thumping the ball in

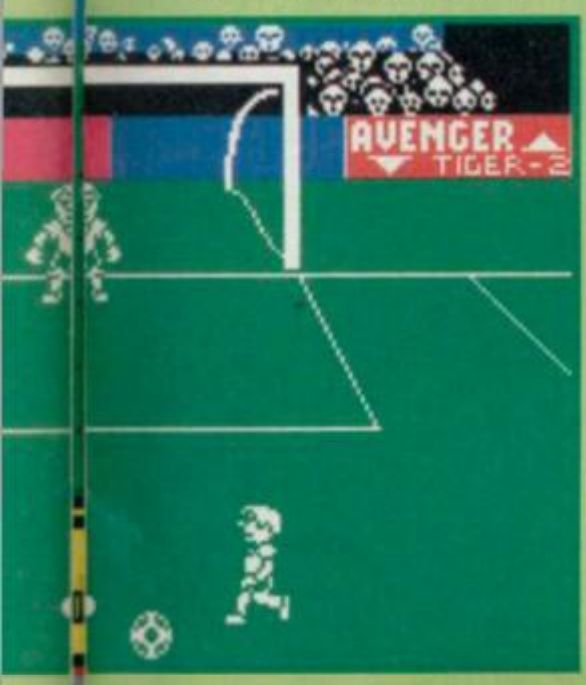
It is almost addictive and definitely satisfying when you pluck one out from under the crossbar, but loses points for being impossibly difficult to pick up the flight of the ball. Forget positioning and narrowing angles, just react when you are sure of the direction of the shot.

And remember boss, you don't need a new 'keeper – spend £200,00 on the defence■

BALLER OF THE YEAR

Italian soccer fans) has quit soccer, blaming the boredom of playing Gremlin's latest, **Footballer of the Year.**

It's, sort of, **Football Manager** only from the footballer's point



of view (rather than the managers, as with Addictive's long-time best seller).

The snag is **Footballer of the Year** is sadly a minor-league game, lacking originality, playing skill and (most importantly) realism.

There's not even enough to the game to even let it succeed as an automatic soccer result and statistics generator.

Quickly then, you become a footballer with a team in one of five divisions.

Choose a division, team and nationality and the game is in motion. You are told of forthcoming fixtures and choose which to play your goal-cards in – only it really makes little difference.

Goal-cards have a value of one to three and represent scoring opportunities – penalties or shots – for your player. The computer then lets you play through those opportunities on a pitch with a goal.

Most of the time it's pretty well a two-in-three chance you'll score.

No skill, OK but how did your rivals get on? Are you topping the score charts in your division? What did the local press make of your debut?

There's no way of knowing.

So...do you want to buy more goal cards? No. Do you want to play a goal card in the next game? Yes...and round again.

And how about El Tel's career? He joined Peterborough on a paltry £75 a week, scored 29 goals to help them to the top of Division IV and was transferred to Swansea (very much against his wishes).

Still, a hatfull of goals for Swansea in the last five games of the season took them from 17th in the table to the championship – no mean feat.

Bored with life in Division III, El Tel started again playing for Juventus in the Super League. Thirty goals in 25 games meant there would probably have been no room for Ian Rush next season but, although Juventus were top of the table, our hero was still on £75 a week, still rated 'average' and only making ends meet through a succession of gambling triumphs outside of soccer■

FACTS BOX

Fails miserably. "Disappointing eh Greavsie?" "What can I say Saint. They've let themselves down badly"

FOOTBALLER OF THE YEAR
Label: Gremlin Graphics
Authors: including Greg Holmes and Christian Shrigley
Price: £7.95

Reviewer: Pratt

★☆☆☆☆

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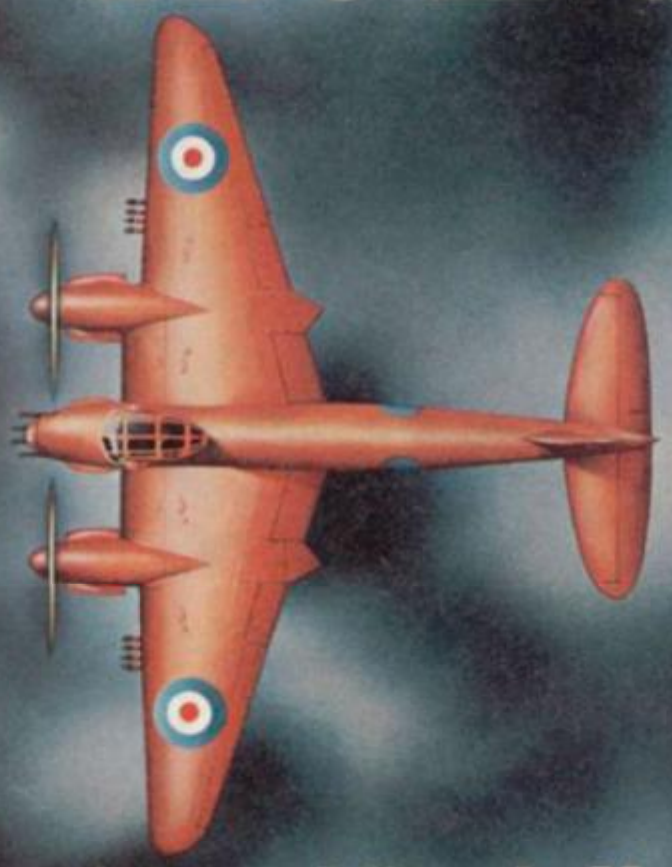
ACE of ACES



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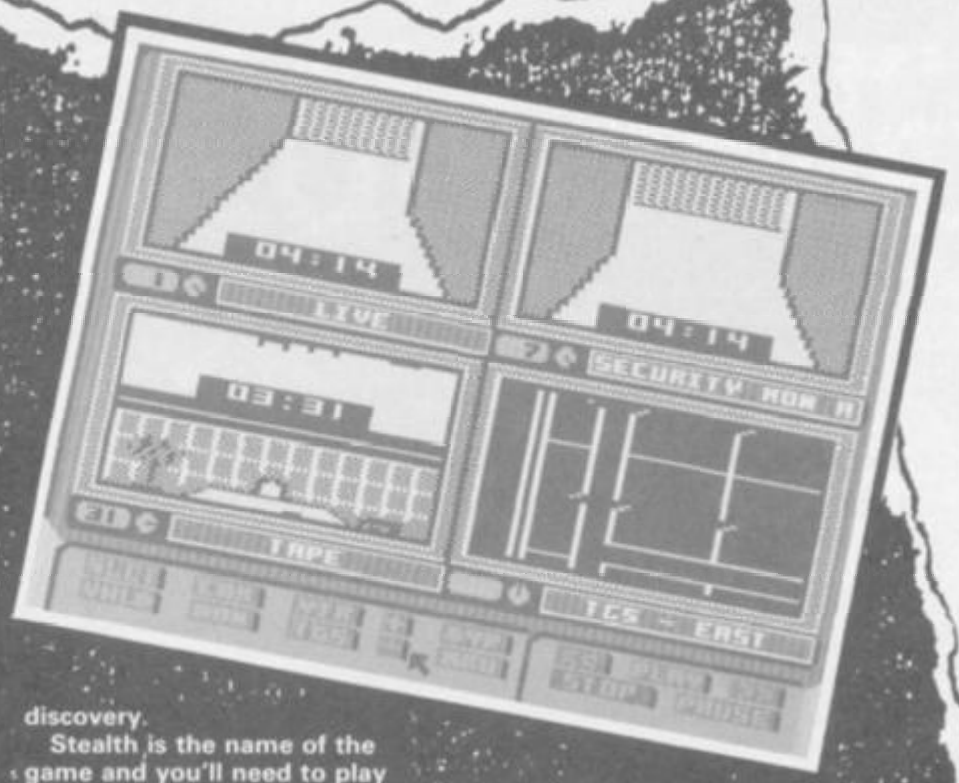
HACKER II



There you are busy hacking into Ronnie's CIA account one day when the US Government decides to contact you.

The CIA knows you're the world's greatest expert on computer security or lack of it – and wants you to steal the top secret Doomsday Papers from a russian military establishment in Siberia. The papers contain a blueprint for the de-stabilisation of western civilisation and the ultimate world supremacy of the USSR.

Yup, you guessed it. Hacker II: The Doomsday Papers is an American piece of software, produced over there on the C64 and now converted to the Spectrum. And as you'd expect the plot reads like a cross between *Rambo* and *Mission Impossible*. Somehow the CIA has smuggled four Mobile remote Units – dirty great unprotected robots into the Ruski base. These are connected to your computer, via a satellite link, and you have to use them to find the filing cabinet in which the Doomsday Papers are stored. Guards continually patrol the complex and a deadly killer robot, called the Annihilator, is put into action if any of the MRUs are discovered.

Fortunately, your computer is equipped with four VDUs and a copy of the latest hacking software, Actisource. Your VDUs are controlled by a strip of icons at the bottom of the screen which are selected using a hand-shaped cursor.

When you first select a screen its picture will roll until you get to alter the vertical hold. Once the picture's clear you can either tune in live to one of the bases' 38 security camera, or select the monitor option which flips through a sequence of all the security camera pictures.

The video camera display is pretty realistic. You can choose to view a tape from any of the 38 cameras. There's fast forward and backward options which speed up the display and an on-screen clock, which has been active since the beginning of the game, acts as an index as you scan the tape. Watching guards run backwards down a corridor is just as funny as running a real video picture backwards.

Make one of your VDUs display the plan of the base with the positions of your MRU's, the guards and any Annililators blipped on it. The plan is not particularly useful in determining where you are – you'll need to find a local security camera for that – but it does give an early warning of enemy patrol and will help you to plan escape routes to avoid discovery.

Stealth is the name of the game and you'll need to play Hacker II several times before you develop a feel for it. The best method of play is to move an MRU one room at a time around the complex. Guards rarely look into any of the rooms unless you're moving around a lot.

Take note of the monitor sequence while you are moving around the base. As you get further into the game you'll be able to spot familiar locations and list the locations of the security cameras. When you've done that you'll be able to find you way around the complex very quickly and reduce the risk of being found.

When you've found the filing cabinet which contains the papers, punch in the security code and remove the documents. It's then simply (!) a matter of evading the guards, moving the MRU out of the complex and delivering the papers to a government agent.

Granted there's a lot to do in Hacker II but, once you've read through the technical documentation and learnt how to use the monitors you'll find the game is easier than you first thought. The snag is it can get repetitive with its search move, search/move mode operation.

FACTS BOX

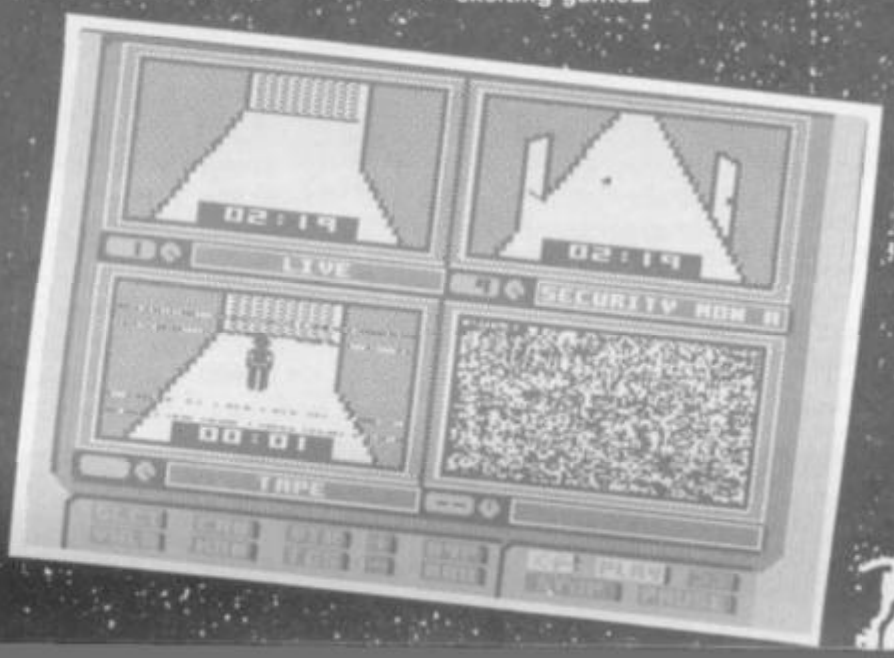
Complex instructions but quite a simple game. It's got an intriguing plot, though there's a distinct lack of hacking

HACKER II:
THE DOOMSDAY PAPERS
Label: Activision
Author: System
Price: £9.95
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

★★★☆☆

Hacker II **beats** They Stole a Million, **its closest competition, for action but, despite initial impressions, both games are let down by the staying power of their gameplay. Strangely, too, the play isn't that dissimilar from Electric Dreams/Activision's other recent release,** Aliens. **For mobile robots substitute a team of space marines. There's a ton more action in** Aliens **though, and it's a much more exciting game■**



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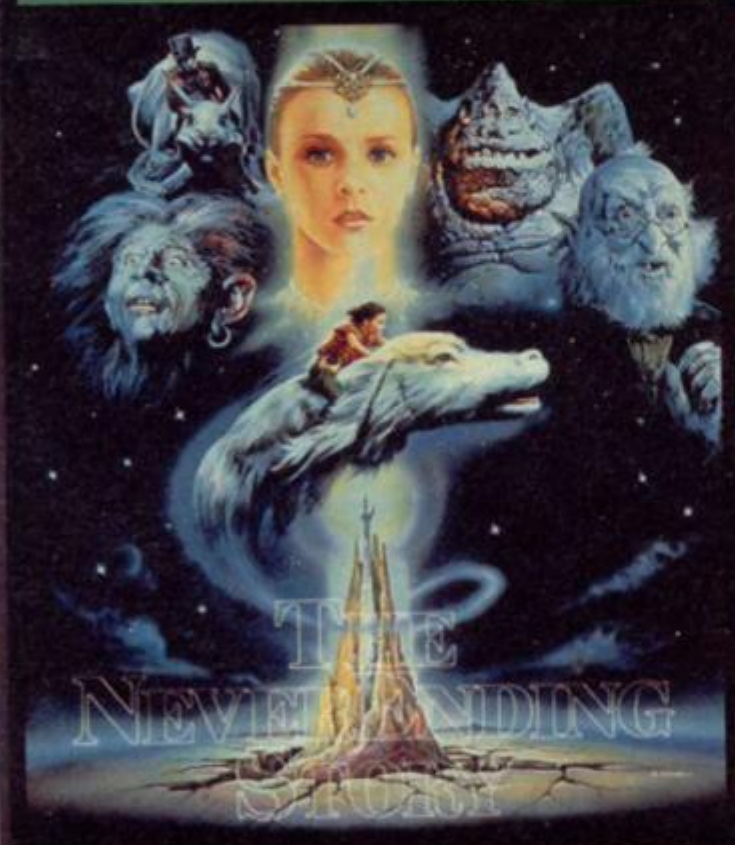

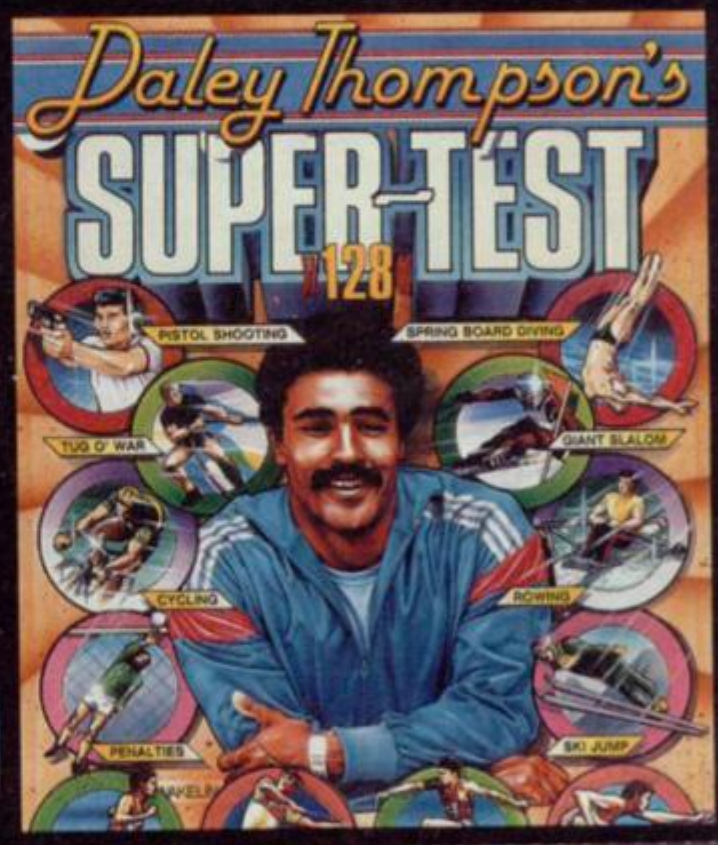

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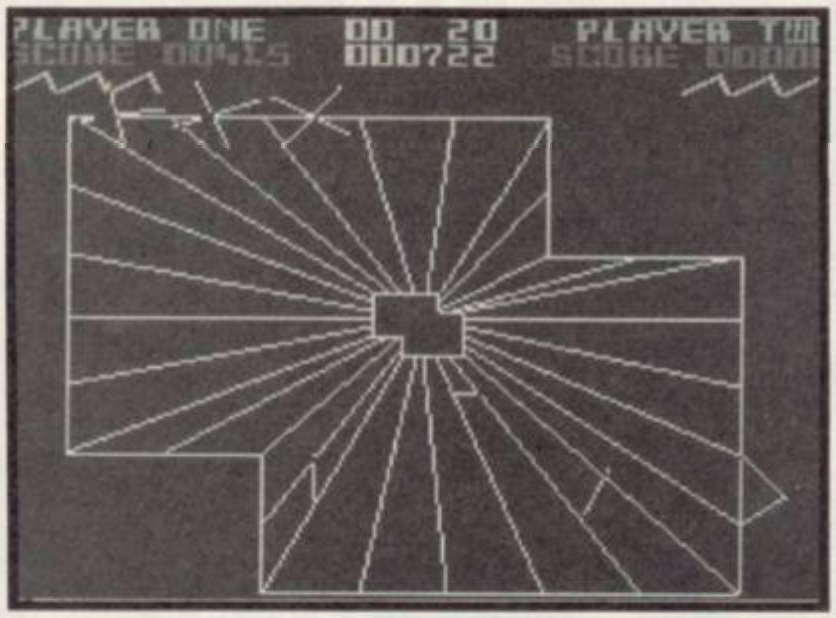
TEMPEST

ARCADE REVIEW



Tempest is now a pretty old coin-op game – designed in an age when graphics were lines and shading and 3D hadn't been invented.

So in one sense it's a bit odd that it's now been converted by Electric Dreams.

The reason, though, is that as coin-op it was one hell of an addictive game.

The plot sounds complex but the play couldn't be simpler. The Hyperspatial Wireways – travel tubes which connect one star system to another – have been infiltrated by pesky, odd-shaped, aliens. Their goal: to conquer your star system by shooting out along the tubes' channels.

Your only weapon, the Zapper, spins around the rim of each wireway. Hit the *Fire* button and it releases an energy pulse which smashes the opposition.

What this means is you get presented with a series of geometrical shapes on-screen, divided into segments (rather like slices of a cake). You zoom around the edge firing inwards – with your fire confined in the 'slice' or channel from which it began. The aliens move out from the centre and mustn't reach the rim. So the gameplay means speeding around the rim firing down the sections where the aliens are nearest to the edge.

If that sound dull, you'd be wrong. Completely. This is one heck of a frenetic game.

There are eight alien-types. Some just move along one channel, some flip from channel to channel and others split into twirling crosses when you hit them with your Zapper. If a tube gets too hot with alien activity you can release an energy net which acts as a smart bomb and destroys everything on the wireway. There's only one net per screen so it's pretty much a last resort tactic.

When you've cleared a screen it disappears and another zips up into its place. It'll be a different shape and, probably, more difficult than the last with more wires, extra twists for the Zapper to make a shorter length from end to end.

The new tube may be a different colour, yellow and blue are favourites of this conversion, but they are nothing compared to the multi-coloured brightness of the original coin-op.

Tempest is a brave conversion but doesn't really measure up to the original Atari coin-op masterpiece. The game was originally designed to use a trackerball and a joystick is an irritatingly inflexible substitute.

The original also features rapid fire which is simultaneous with zapper movement.

The Electric Dreams' Zapper has to be stopped before you fire and you can only make one shot at a time. That's not to say, however, that I won't be playing this **Tempest** long after you've read this review. The game is just based round such a strong idea■

FACTS BOX

Not a patch on the coin-op original, but that's to be expected. It's pretty addicitive all the same

TEMPEST
Label: Electric Dreams
Price: £8.95
Memory: 48K/128K
Joystick: various

Reviewer: John Gilbert

★★★★☆

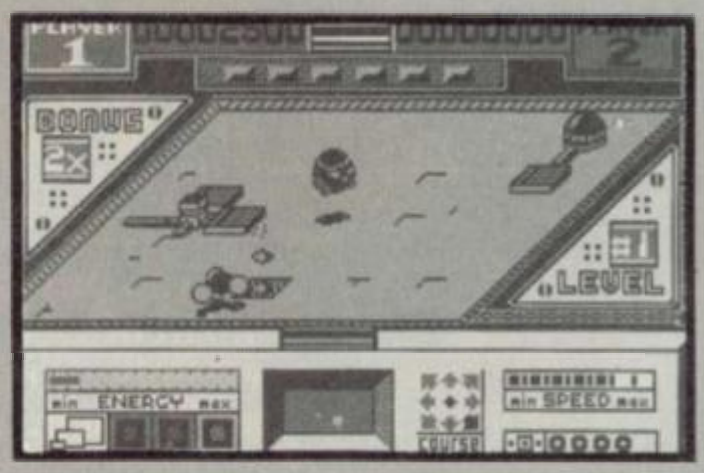
ORBIX THE TERRORBALL

The Streetwise label seems to be an arcade game off-shoot of Domark and in this guise **Orbix the Terrorball** has been released.

It may not be a wholly original arcade game but it rings the changes a little on some traditional ideas.

With a name like **Terrorball** it would be pretty surprising if this game lacked balls, or didn't have at least one. Sure enough, you bounce all over the place. You bounce slow or you bounce fast, it depends on the controls, but one thing is for sure – you bounce into a lot of things and hardly any of them do you any good.

The screen is pretty clever, a fully scrolling 3D landscape (two-colours only of course) littered with assorted geometrical shapes and other peculiar objects. Very many of these objects wish to kill you or otherwise hinder your bouncing progress. Naturally there are other problems namely the nasty spiders (yuk) and the other ball-like-thing-with-flickery bits on it. You can blast them and miraculously they turn into extra energy (and you need it) but they are incredibly difficult to hit.



There is a plot. It involves collecting six bits of a spacecraft, rescuing the crew and getting them off this distant planet.

Getting the bits involves first finding a detector (a little white blip on a radar screen) then finding a factory droid (a cross on the screen) which is running away. You bounce furiously after it, trying not to bump into anything, if you catch it you blast it, it drops the part and you take it to the launch pad (with a time limit).

I sort of enjoyed **Orbix**. The game looks pretty good, but I found it infuriatingly difficult, and ultimately, later levels get even more difficult, I think it might get a bit tedious.

Still, not a bad start for the Streetwise label and could be an outside bet for the charts■

FACTS BOX

Fairly original bounce the ball game, with clever 3D graphics. Difficult and perhaps lacking in variety in the long term

ORBIX THE TERRORBALL
Label: Streetwise
Author: John Pragnell
Price: £7.95
Memory: 48K/128K
Joystick: various

Reviewer: Graham Taylor

★★★☆☆

More adventures from the Arcade Sensation.

THE DEEPER DUNGEONS

ANOTHER 512 ALL NEW!
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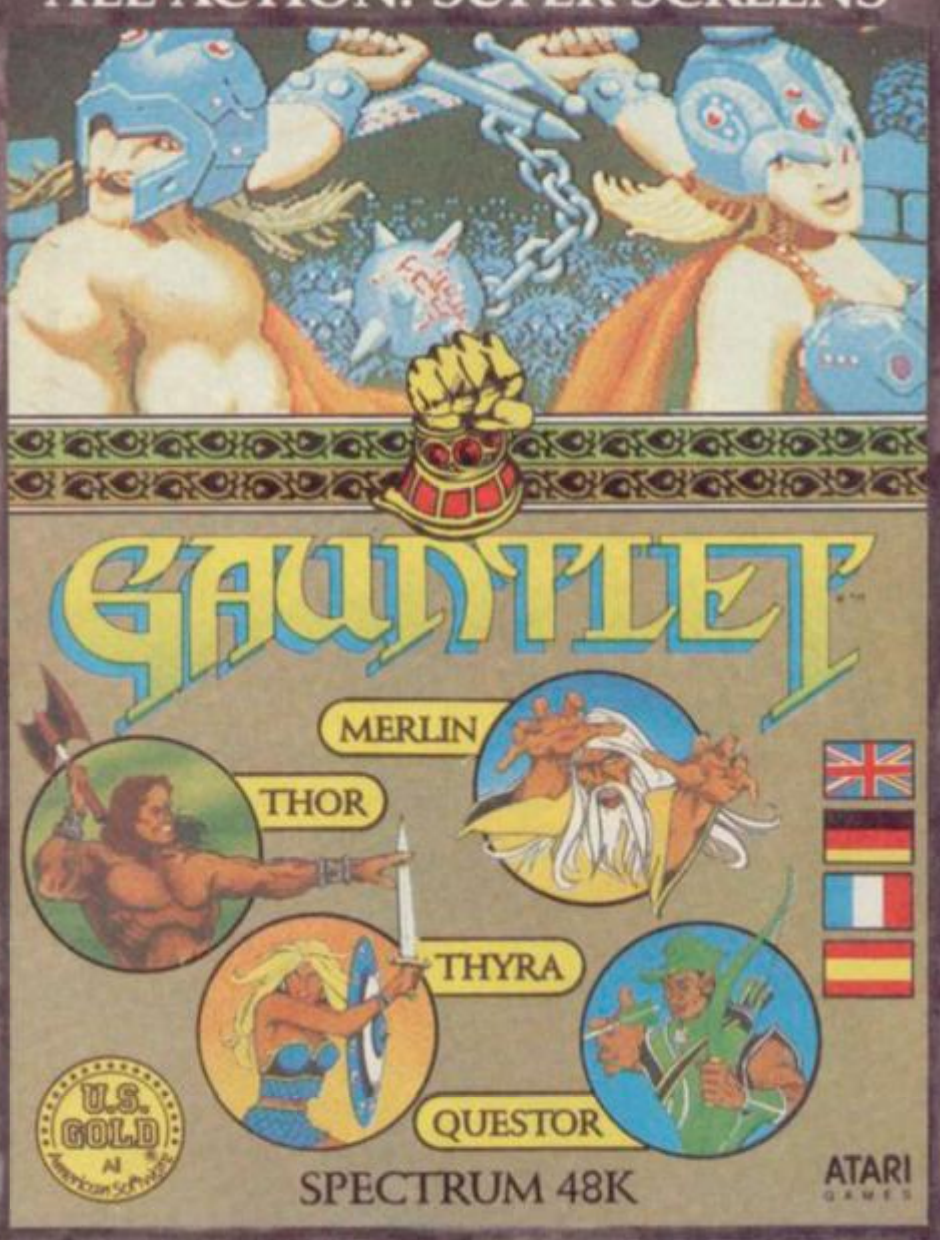

Did you buy the no. 1 Arcade Smash Hit of 1986 – Gauntlet? If not, you certainly should have. If you did, then you'll be delighted to know that you can play another amazing 512 levels with this super add on.

Requires original Gauntlet to run this version.

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ATARI GAMES

GOT A NEW 128K+2 START HERE!

So you get a nice new shiny 128K+2 from Santa. You've read the book. You've played the games. Maybe you've even tried a program or two.

Now what? Well, Basic is a great language for a good mess about. With just a few well chosen lines you can produce some rather nifty effects, and spice up most any program.

If you know any veteran (like more than a couple or months) computer owners, you'll probably have encountered the 'code-snob' syndrome. Betraying themselves with off the cuff lines like 'Basic isn't powerful enough', 'Why don't you do it in machine code?' and 'Spectrum Basic is too slow for anything'.

Code-snobs desperately try to cover up the fact that they can't actually program for toffee-coated peanuts. And you, gentle reader, can. To prove it, just show the offending snob one of the following routines. And watch their jaw drop.

Let's start off on the outside, and work our way in. As you'll know from reading your

manual, the area around the edge of the screen is called the border. It can be set to one of the eight colours by using, unsurprisingly, the *Border* command. Just one colour at a time, right? well, no. In fact, by a little technical magic, the border can be persuaded to poly-chromatify prettily. What does polychromatify mean? Either cheat and look it up in a dictionary, or type in Listing 1.

Good, no? It works by relying on the fact that Basic can do a few things quite quickly, and *Border* is one of them. It's fast enough to get a few different colours on to the border in the time it takes to produce one TV picture (1/50th of a second, since you ask). The instruction *Pause* 1 makes the computer wait for a TV

```
  10 REM Listing 1
  20 PAUSE 1
  30 BORDER 1: BORDER 2: BORDER
3: BORDER 5:
  40 GO TO 20
```

picture to start, otherwise the colours start at a different place each picture.

Because the computer spends all it's time just keeping the pattern going, you might think that the effect is of novelty value only. Well, that's almost true. You can use it to jazz up a 'Press any key' type of prompt, like so:

```
100 PRINT "Press any key when ready"
110 PAUSE 1: BORDER 1: BORdER 2: BORDER 4:
IF INKEY$="" THEN GOTO 1110
```

As fans of cricket will well know, the word *Border* is closely associated with the word *Out*. Much the same is true in Basic, and the command *Border* 4 is almost the same as *Out* 254,4. However, the *Out* version can also drive the sound output of the Spectrum. If you change Listing 1 so that all the *Borders* are replaced with *Out* 254, and add 24 to every second colour number, the Spectrum will make a low pitched buzz as the pattern is produced. I thought you'd be impressed.

Abandoning the colours for a moment, we'll amplify on the sound. Part 19 of the manual mentions almost in passing that the *Beep* command, although superceded by *Play* for musical purposes, can be used for special effects. It's true, it can. And Listing 2 shows you how. In this area more than most a little

```
  10 REM listing 2
  20 LET high=30: LET low=-30: L
ET inc=3.5
  30 FOR f=low TO high STEP inc
  40 BEEP .02,f: BEEP .02,f-12:
BEEP .02,12-f
  50 NEXT f
  60 GO TO 30
```

experimentation goes a long way. Try putting more Beep instructions in Line 40, with the second number generated by a little maths from the *For . . . Next* loop variable. If that sort of thing doesn't mean much to you, then just try out instructions like *Beep* .05,F/3 or *Beep* .05,F+7. Or even both.

The worst that can happen is an error message from the computer saying 'B – integer out of range, 40:2'. This is the poor Spectrum complaining that you tried to make it *Beep* out of range. Somewhere along the line, one of the *Beep* instructions generated a number which that computer can't cope with; to fix it, make the value of the variable called *High* smaller, or change the *Beep* instruction at fault. This sort of thing is called debugging, and is an essential part of programming.

For a few more ideas, try changing the values of *Low*, *High* and *Inc*. There's no reason why *Low* can't be bigger than *High*, but you'll have to make the value of INC negative if it is. If you're feeling really keen, try varying the duration (the first number) by making it part of another *For. . . Next* loop. If you're a little unsure about loops and all that then have a squint at Part 4 of the manual. It'll soon put you on the right track.

Back to the screen. There's a lot of things that you can do with plain text that aren't obvious from the manual. As almost all programs at some stage print text on to the screen, a little imagination and a bit of thought can spice things up no end. For starters, although it's easy to put text up in any colour your heart may desire, there's no obvious way to change the colours of stuff already on screen. You can use the *Poke* command, but it's quite a time consuming process and if you get something wrong you can crash the computer and lose your program. A much faster and safer way involves the magic word *Over*.

```
  10 REM listing 3
  20 DIM a$(704)
  30 FOR f=10 TO 70 STEP 5
  40 CIRCLE 100,100,f
  50 NEXT f
  60 INPUT " Pick INK ";i;" and
PAPER ";p
  70 BORDER p
  80 PRINT AT 0,0; INK i; PAPER
p; OVER 1;a$
  90 GO TO 60
```

Over 1 (see Part 16 of the manual) is really designed to help graphics to be mixed together. It does this by not erasing what's on the screen when something is *Printed*, *Plotted* or *Drawn*. However, it has a side effect of changing the colours on the screen to the latest setting. So, if you print a space on to the screen with *Over* 1, the text already there won't change at all, but the colours will. Listing 3 shows this in action. It recolours the whole screen, and uses the fact that when the Spectrum does a *Dim A$*, it fills *A$* with a character that prints as a space. *A$* can be thought of as just an ordinary string which is 704 characters long – the number of characters that fit on to the screen.

There's no reason why you have to recolour the entire screen; by using a shorter string and *Print At. . .*, you can change as much or as little of the screen as you want. You should be able to manage the cycling colour effect as seen on **Defender** and other much loved games, by recolouring a single line fast. Listing 4 gives the general idea.

```
  10 REM listing 4
  20 INK 7: PAPER 0: BORDER 0: C
LS
  30 DIM a$(32)
  40 PRINT AT 7,0;"   Your messa
ge goes here..."
  50 FOR f=0 TO 7
  60 PRINT AT 7,0: OVER 1: INK f
;a$
  70 PAUSE 2
  80 NEXT f
  90 GO TO 50
```

Of course, there's more than one trick to play with a piece of string. A popular effect is the sideways scrolling of a message that's too long to fit on to one screen line at once. It's a doodle to do from Basic as well. The idea is to extract one screen line's worth of text from the string, print it and then do the same again one character further along. It might sound a bit complicated, but Spectrum Basic makes it quite easy with a function called string slicing. It's explained in some detail in Part 8 of the manual, but there aren't many practical examples of slicing in action. In essence, if you have a string of characters called Q$ (for example), you can just print 32 characters from that string using PRINT Q$(1 TO 32). Of course, you don't have to print the same 32 characters every time, and if you print the 1st to the 32nd, then the 2nd to the 33rd and so on, you'll get the sideways scrolling effect we're on about.

```
  10 REM listing 5
  20 INPUT "Your message, please
";q$
  30 IF LEN q$<33 THEN LET q$=q$
+" "+q$: GO TO 30
  40 FOR f=1 TO LEN q$
  50 IF f+32<LEN q$ THEN GO TO 1
00
  60 PRINT AT 7,0;q$(f+1 TO );q$
( TO 32+f-LEN q$)
  70 PAUSE 3
  80 NEXT f
  90 GO TO 40
 100 PRINT AT 7,0;q$(f TO f+31)
 110 GO TO 70
```

Listing 5 uses the technique to display any message you type in. Another thing that gets used in this listing is *Len* – a function that tells the computer how many characters there are in the string. This is important because if the computer tries to look at a part of the string that isn't there, like the 11th character in a string that's only 10 long, it'll stop with an error.

58 ▶

TASWORD 128

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With 64 characters per line on the screen and a host of useful features TASWORD TWO is the ideal cassette based word processing package for the Spectrum owner.

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TASCOPY

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TASCOPY for the ZX Spectrum with Interface 1
cassette £9.90 microdrive cartridge £11.40

The Spectrum TASCOPY is for use with the RS232 output on ZX Interface 1. It produces both monochrome (in a choice of two sizes) and large copies in which the different screen colours are printed as different shades. With TASCOPY you can keep a permanent and impressive record of your screen pictures and diagrams. A list of printers supported by TASCOPY is given to the left.

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THE ELECTRONIC DIARY

TAS-DIARY for the ZX 48K Spectrum and microdrives. Cassette £9.90

Keep an electronic day-to-day diary on microdrive! TAS-DIARY includes a clock, calendar, and a separate screen display for every day of the year. Invaluable for reminders, appointments, and for keeping a record of your day. The data for each month is stored as a separate microdrive file so that your data for a year is only constrained by the microdrive capacity. TAS-DIARY will work for this year, next year, and every year up to 2100! Supplied on cassette for automatic transfer to microdrive.

TASMAN PRINTER

INTERFACE

TASPRINT PRINTER INTERFACE for the ZX Spectrum £29.90
RS232 Cable for ZX Interface 1 £14.50

Plug into your Spectrum and drive any printer fitted with the Centronics standard parallel interface. Supplied complete with ribbon cable and driving software. The user changeable interface software makes it easy to send control codes to your printer using the method so successfully pioneered with TASWORD TWO. The cassette contains fast machine code high resolution full width SCREEN COPY SOFTWARE for Epson, Mannesmann Tally, Shinwa, Star, Tandy Colour Graphic (in colour!) printers. TASCOPY shaded screen copy software for this interface (value £9.90) is INCLUDED in this package.

The TASCOPIES and TASPRINTS drive all Epson compatible eight pin dot-matrix printers e.g.

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EPSON FX-80	MANNESMANN TALLY MT-80	BROTHER HR5
EPSON RX-80	STAR DMP501 515 5610	SHINWA CP-80
EPSON RX-80 TYPE III	COSMOS-80	DATAC PANTHER
EPSON MX-80 TYPE III		DATAC PANTHER II

COMPACTA - bold and heavy, good for emphasis
DATA-RUN - A FUTURISTIC SCRIPT
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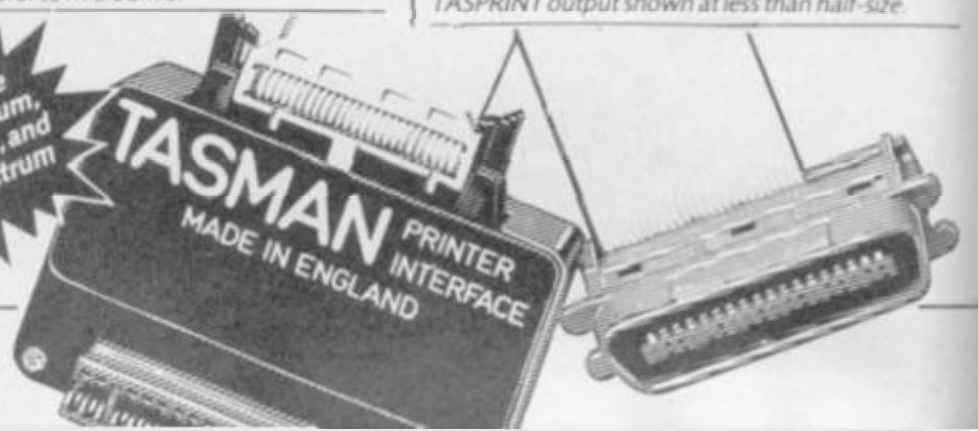
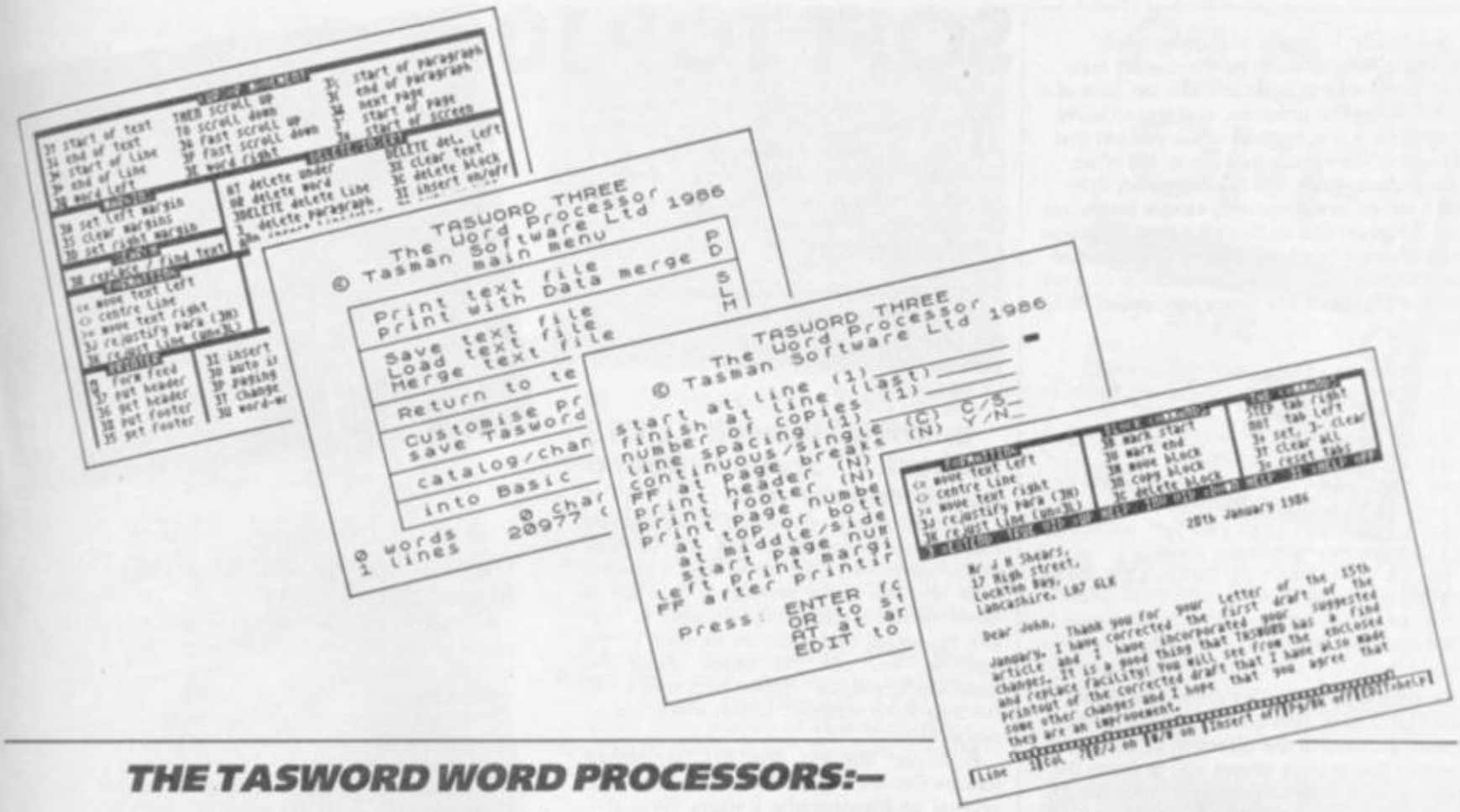
TASPRINT output shown at less than half-size.

Compatible with Spectrum, Spectrum+, and 128K Spectrum





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TASWORD THREE – *for the ZX 48K Spectrum – Microdrive £16.50*

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THE SCREEN STRETCHER

TASWIDE for the ZX 48K Spectrum cassette £5.50

With this machine code utility you can write your own Basic programs that will, with normal PRINT statements, print onto the screen in the compact lettering used by TASWORD TWO. With TASWIDE you can double the information shown on the screen!

TASWORD THREE

FOR OPUS DISCOVERY

A special version of TASWORD THREE for the Opus Discovery disc drive. Disc £19.50

ZX SPECTRUM 128

TASWORD 128

THE WORD PROCESSOR

TASWORD 128 for the ZX Spectrum 128 cassette £13.90

TASWORD 128 has been especially developed to use the additional memory of the 128K Spectrum. This gives text files that are over 60K long – this is about ten thousand words! TASWORD 128 has all the features of TASWORD THREE (mail merge only when transferred to microdrive). TASWORD 128 is supplied on, and will run on, cassette. TASWORD 128 is also readily transferred to microdrive by following instructions supplied with the program.

SINCLAIR QL

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THE SCREEN COPIER

TASCOPY QL for the Sinclair QL microdrive cartridge £12.90

TASCOPY QL adds new commands to QL Superbasic. Execute these commands to print a shaded copy of the screen. Print the entire screen or just a specified window. TASCOPY QL also produces large "poster size" screen copies on more than one sheet of paper which can be cut and joined to make the poster.

TASPRINT QL

THE STYLE WRITER

TASPRINT QL for the Sinclair QL microdrive cartridge £19.95

TASPRINT QL includes a screen editor used to modify files created by other programs, such as QUILL, or by the user from Basic. These modified files include TASPRINT control characters and may be printed, using TASPRINT, in one or more of the unique TASPRINT fonts.

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GOT A NEW 128K+2 START HERE!

And finally, a couple of biggies (well, biggie-er), one to show how it doesn't take much in the way of Basic to make the core of a potentially useful program, and one to leave running for a few minutes while you put that code snob's jaw back into place. It's of no great consequence, but it looks pretty nifty. And it shows how some very simple maths (no, don't go away) can spruce up a little graphical jiggerypokery (such a lovely word). The first one – Listing 6 – is an implementation of a toy that was popular a few years ago, called Etch-a-Sketch.

```
  10 REM Listing 6 - drawing
  20 LET x=30: LET y=30: LET dot
=1
  30 OVER 1: PLOT x,y: PAUSE 3:
PLOT x,y: PAUSE 3: OVER 0
  40 LET x=x+(INKEY$="p" AND x<2
55)-(INKEY$="o" AND x>0)
  50 LET y=y+(INKEY$="q" AND y<1
74)-(INKEY$="a" AND y>0)
  60 IF INKEY$=" " THEN LET dot=
NOT dot: BEEP .1,5
  70 IF dot THEN PLOT x,y
  80 GO TO 30
```

It's simple enough. You press one of the keys O,P,Q or A, and a line appears on the screen, growing in the direction of the key. Pressing *Space* once allows you to move the drawing point without leaving a line behind, pressing it again turns the line back on. As it stands, there's no way to rub out a line or change the colours. But you can work those out, can't you? Other innovations you might like to consider include a way of storing lots of screen in the Ram disc (Part 20 of the manual); printing out a copy of the screen to a printer (Part 21) or printing text where the drawing point is. And if you've got a joystick, you might like to use that instead of the keyboard.

The second program – Listing 7 – is a little

```
  10 REM listing 7 - K/LIDO
  20 PAPER 0: BORDER 0: CLS
  30 INK RND*7: BRIGHT RND
  40 LET x= 1+RND*126: LET y=1 +
RND*86
  50 LET a=x: LET b=y: GO SUB 10
00
  60 LET b=174-y: GO SUB 1000
  70 LET a=255-x: LET b=y: GO SU
B 1000
  80 LET b=174-y: GO SUB 1000
  90 GO TO 30
1000 PLOT a,b: PLOT a+1,b: PLOT
a+1,b+1: PLOT a,b+1
1010 RETURN
```

kaleidoscopic. It treats the screen as being divided into four quarters, and anything it plots in one gets 'reflected' into the other three. The clever bit with the Spectrum lies in getting the point size right. If it's too small, like just a single pixel, then the colours for each point will tend to clash. It it's too big, like a complete character, then the overall effect will tend to be a bit crude. The program plots four pixels per shot, you might like to change it and watch the results.

With the ingenuity and expertise that you've acquired you can incorporate the recolouring scheme mentioned earlier into the program, so that if a key is pushed a new colour scheme appears. Or then again, you might like to give a kaleidoscope option to the drawing program. That's the nice thing about Basic; it makes it easy to just try things out■

Rupert Goodwins

SOFT TOP 10

You can see hundred and hundreds of software titles spilling over the shop shelves. What you really want is an absolutely definitive, clear as crystal guide to the ten best games there have ever been on the Spectrum so that you can kick off your collection of software with solid gold all time Classics.

Here, as definitive as these things can ever be, is the SU Top Ten (recentish) games on the Spectrum ever (Oh God, I can see the postbag now) And they're NOT NECESSARILY IN ORDER!!

● Trivial Pursuit £14.95 Domark. Style: Board game conversion

A board game you would have thought could never be computerised, yet Domark and programmers ODE have done a spectacular job. The game features a new set of questions some specifically included to feature the sound and graphics facilities of the machine. You can still argue about the questions/let people off/give hints and if you fall over from alcoholic liquids there are no pieces to job.

If you like this one try: **Scrabble** (Leisure Genius) – grade A conversion of the original or **Monopoly** (Leisure Genius) – sounds impossible, it isn't

● Starglider £14.95 Rainbird. Style: 3D space game

Technically astounding with animated 3D graphics. You zoom over a planet surface which looks like New York at night. Giant Walkers stomp over the landscape, gun emplacements launch geometric missiles and giant towers linked by power lines provide your only means of refuelling. Stunning.

If you like this one try: **Elite** (Rainbird) – 3D space fighting and trading game with lots to it or **Academy II** (CRL) very complex multi-part planet skimming extravaganza.

● Tommahawk £9.95. Digital Integration. Style: Simulation

Possibly the most realistic of the simulations of the Spectrum. You fly a helicopter which features accurate control response and 3D view of the outside world. There are all kinds of variation of weapon combination and you get to attack both tanks and aircraft as part of a strategic game.

If you like this one try: **Strike Force Harrier** (Mirrorsoft) – simulation of a harrier jet with good graphics and genuine strategic element or **Fighter Pilot** (Digital Integration) – perhaps the best jet aircraft simulation there is

...JUST WHAT ARE POKES?

After you've been killed for the fortieth time by some marauding alien, it's only natural to get the urge to, well, cheat.

And who are we to deny you such pleasures? You'll find lots of information hidden away within the pages of this very magazine to help you do away with aliens and the enemy with consumate ease and minimal personal risk. It's called **Poking.**

But the art of the **Poke,** *as exemplified by Jon Riglar, is a mystery to many a neophyte (that's posh for new user, natch).*

So here's a short guide to what it does, how it does it and how to make it all work.

Every Spectrum game consists of a set of programs and data. These programs and data are recorded one by one on to tape, and are known in the trade as files. The first file on a tape is invariably a Basic program, which then runs and loads in the succeeding files. These are the loading screen, the game itself and any data that it might need.

To trick the game into giving you infinite lives, unlimited energy or millions of missiles, you need some subtle alterations to these files.

Problem one: they are invariably in machine code and unlistable to the average gamesplayer. The idea here is to let other people do the hard work, and then let them write in to Riglar. All you have to do is buy the magazine. Not difficult.

Problem two: how to get the published **Pokes** *from the page into your machine, where they can get to work.*

You'll notice that they're all in the form of

GOT A NEW 128K+2 START HERE!

● Zub £2.99 Mastertronic. Style: Trad, arcade-style budget game

A simple idea beautifully executed and featuring some of the best sound ever heard on the Spectrum. You control Zub, an inoffensive looking alien as you ride a series of platforms and attempt to get off a planet. The problem is there are these aliens who keep knocking you back to square one. Infuriating and cheap.

▶ If you like this one other cheapies are: Knight Tyme (Mastertronic) – lots to do and lots of problems to solve and it only costs £2.99 or Molecule Man (Mastertronic) is just as cheap and is a nifty 3D arcade game

short (and not so short) programs. Type them in like any other program, and run them. After a short pause, they'll ask you to play the game tape, which you should do as per usual. If you find that nothing much happens, then check your program against the listing in the magazine. There are usually a lot of numbers, all of which have to be dead right. One number missed out, or mistyped, and the whole caboodle will most likely go phut.

The programs work by replacing that first Basic progam on the tape. They'll load in the games files as before, but before starting the game itself they make a few changes to the code, so that you never ever die.

If there aren't any **Pokes** *for your favourite game, you might like to have a go at finding them yourself. The first step is to get at the Basic program that comes first on the tape. To do this, you'll have to stop it automatically running as soon as it's loaded in.*

That's simpler than it sounds, instead of using **Load** *"" to get going, use* **Merge** *"". This will load in the program, but won't let it* **Run.** *You can then examine the Basic in the same way as any other program, by using the Spectrum editor.*

Somewhere towards the end of the Basic, you'll see a line like **Load "" Code:Randomize Usr** *32010*

This is the place where the game code is loaded in, and the **Randomize Usr** *is the thing that gets it all running. If you replace the* **Randomize. . .** *with a* **Stop** *command, the computer will load in the code and stop. You can then browse through the game, and try and spot what's happening. However, because it's all in machine-code before you can look: a disassembler, some time and a bit of experience. And those you'll have to get for yourself!* ■

Rupert Goodwins

● Terrors of Trantoss £7.95 Ariolasoft. Style: adventure

Always difficult to decide that one adventure is better than another. This is a good combination of atmospheric graphics and location descritpions, sophisticated language analysis and witty and inventive puzzles (you have to control two people – sometimes simultaneously).

▶ If you like this one you should try: **The Pawn** (Rainbird) – very sophisticated text-only adventure, **The Boggit** (CRL) – a genuinely funny parady of **The Hobbit** or **Jewels of Darkness** – Rainbird, a giant trilogy of classic adventures

● The Writer £14.95 Softechnics. Style: doing useful things at play

Of all the serious things you could do with your Spectrum, experience shows the most likely thing you are to actually do is use it for wordprocessing. There are a number of good wordprocessors for the Spectrum but this has perhaps the most features and most flexibility.

▶ If you like this one try **Artist II** (Softechnics) – a graphics package compatible with **The Writer** to give you a mini page make-up tool

● Alien 8 £9.95* US Gold. Style: Solid 3D arcade game.

Why the asterix? Because this superb game written by Ultimate is currently available in a 'best of' package with several other excellent games for £9.95. It features animated graphics than look like cartoons and stunning gameplay that makes full use of the 3D techniques.

▶ If you like this try: **Batman** (Ocean) – similar style of graphics but even bigger with possibly even more fiendish problems than **Alien 8** or **Nosferatu** (Piranha) – similar looking game with complicated plot based around Dracula

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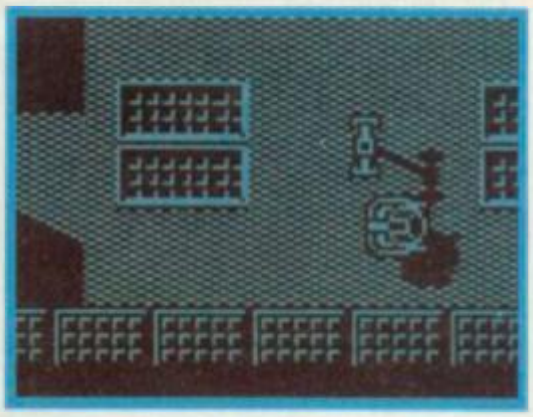
Send coupon to: Hive Smash, Sinclair User, Priory Court, 30-32 Farringdon Lane, London EC1R 3AU along with a cheque/postal order payable to Firebird for £7.95. Offer closes February 26th 1987.

● Uridium £7.95 Hewson. Style: Shoot 'em up

Astonishingly difficult space game with hosts of high-speed blasting and speed of light dodging. It looks great and is just about the fastest arcade game around

▶ If you like this try: **Lightforce** (Faster Than Light) – big graphics, lots of colour



● Doomdark's Revenge £9.95* Beyond. Style: Graphic adventure

It's asterix time again. This superb game is currently packaged with assorted other goodies on a 'best of Beyond' tape. Doomdark is a strategy game where you control vast armies and move them across magical landscapes. Unlike conventional strategy games it features superb true-to-perspective graphics where objects grow larger on screen as you move towards them.

▶ If you like this try: **Runestone** (Firebird) – neat mix of strategy, graphics and adventure

● Sacred Armour of Antiriad £7.95 Palace. Style: Platforms and ladders

Well not really platforms and ladders, but it is all around judgement, timing and skill. You seek out a suit of invinvibility. This involves much jumping (complete with waving hair) and dodging as a vast number of unlikely objects attempting to smash you to bits. More varied than most of such games.

▶ If you like this try: **Dynamite Dan II** (Mirrorsoft) – excellent ladders and platforms with some stunningly inventive backgrounds and plenty of fresh ideas or **Jet Set Willy** (Software Projects)

60 ▶

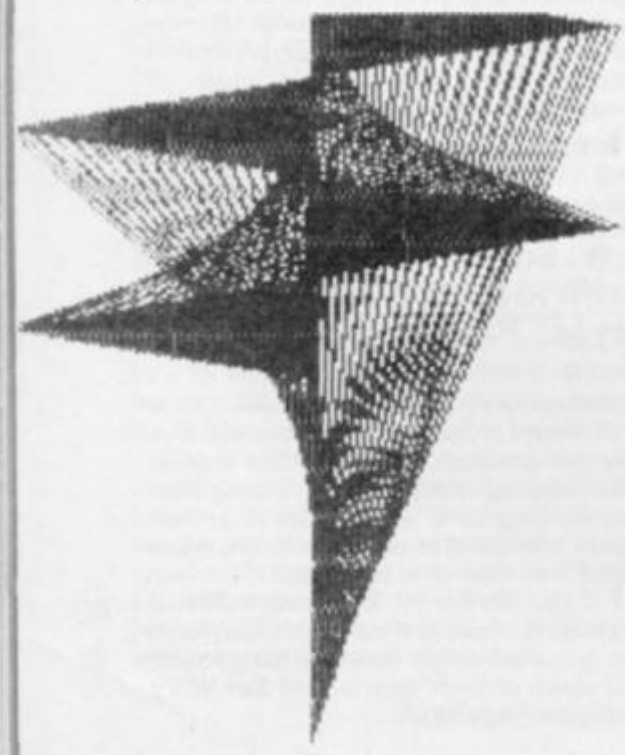
GOT A NEW 128K+2 START HERE!

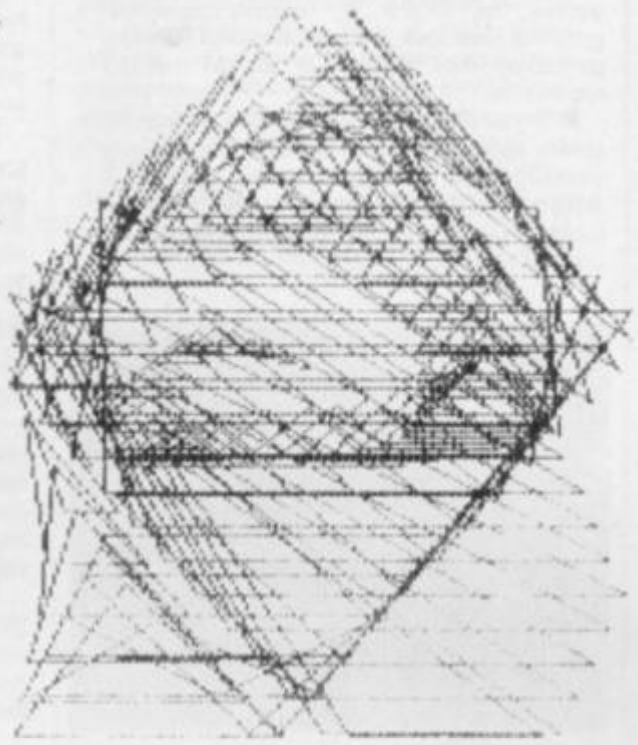
Crazy Patterns

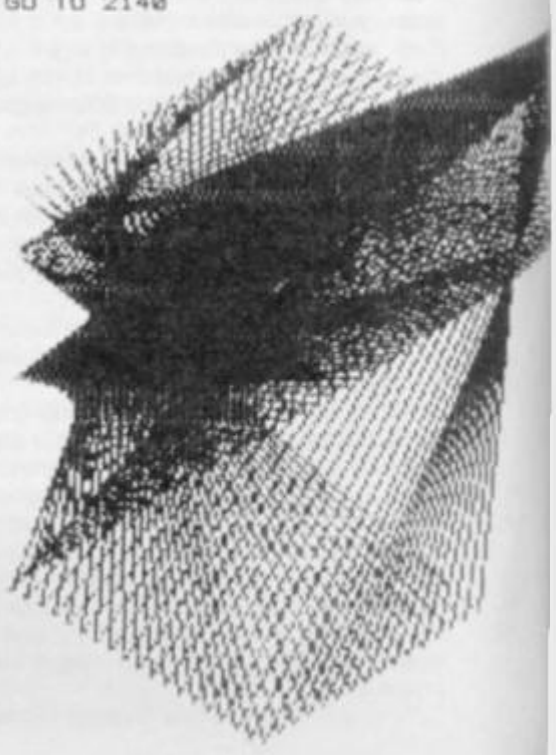
by Allister Brimbie

Here's a very simple program to help new owners get the hang of what the Spec can do graphically. Type it in and Run it. There are full instructions in the program.

```
  1 REM Pattern generator
  2 REM By Allister Brimble '86
  3 GO SUB 2000: REM instruct.
  9 REM Initialization
 10 INPUT "Enter pattern comple
xity(1-9) ";cl
 11 IF cl>9 OR cl<1 THEN  GO TO
 10
 12 LET a$=INKEY$
 20 LET wi=254
 30 LET hi=174
 40 LET cx=wi/2
 50 LET cy=hi/2
 60 LET mx=wi/2
 70 LET my=hi/20
 80 DIM x(cl): DIM y(cl): DIM v
(cl): DIM w(cl): DIM c(cl)
 90 GO SUB 680
100 PRINT AT 7,0;;"(1) Make pat
tern from shapes."
110 PRINT '"(2) Make pattern f
rom dots."
120 PRINT AT 20,0;"ENTER THE NU
MBER OF YOUR CHOICE"
125 INPUT d
130 IF d>2 OR d<1 THEN  GO TO 1
20
140 REM
145 INPUT "Enter Paper colour "
;paper
146 INPUT "Enter Border colour
";border
148 PAPER paper: BORDER border:
BRIGHT 1: CLS
150 GO SUB 560
160 LET v=0
170 LET w=0
180 LET q$=INKEY$
190 IF q$="a" THEN  LET w=2
200 IF q$="z" THEN  LET w=-2
210 IF q$="n" THEN  LET v=-2
220 IF q$="m" THEN  LET v=2
230 IF q$=" " THEN  GO SUB 560
240 IF q$="q" THEN  GO SUB 480
250 IF q$="w" THEN  GO SUB 520
260 IF q$="s" THEN  GO SUB 650
261 IF q$="c" THEN  COPY
262 IF q$="d" THEN  SAVE "patte
rn"SCREEN$
263 IF q$="r" THEN  PAPER 7: IN
K 0: CLS : GO TO 10
270 FOR j=1 TO cl
280 IF v(j)<-mx THEN  LET v(j)=
-mx
290 IF v(j)>mx THEN  LET v(j)=m
x
300 IF w(j)<-my THEN  LET w(j)=
-my
310 IF w(j)>my THEN  LET w(j)=m
y
320 LET v(j)=v(j)+v
330 LET w(j)=w(j)+w
340 LET x(j)=x(j)+v(j)
350 LET y(j)=y(j)+w(j)
360 IF x(j)<1 THEN  LET x(j)=1:
LET v(j)=-v(j)
370 IF y(j)<1 THEN  LET y(j)=1:
LET w(j)=-w(j)
380 IF x(j)>wi THEN  LET x(j)=w
i: LET v(j)=-v(j)
390 IF y(j)>hi THEN  LET y(j)=h
i: LET w(j)=-w(j)
400 NEXT j
410 PLOT  OVER 1; INVERSE 1;x(c
l),y(cl)
415 LET ox=x(cl): LET oy=y(cl)
420 FOR j=1 TO cl
430 INK c(j)
440 IF d=1 THEN  DRAW x(j)-ox,y
(j)-oy
450 IF d=2 THEN  PLOT x(j),y(j)
455 LET ox=x(j): LET oy=y(j)
460 NEXT j
470 GO TO 160
480 FOR i=1 TO cl
490 LET v(i)=-v(i)
500 NEXT i
510 RETURN
520 FOR i=1 TO cl
530 LET w(i)=-w(i)
540 NEXT i
550 RETURN
560 CLS
570 FOR i=1 TO cl
580 LET x(i)=cx
590 LET y(i)=cy
600 LET v(i)=ABS INT (RND*(1)*1
2-6)
610 LET w(i)=ABS INT (RND*(1)*1
2-6)
620 NEXT i
630 PLOT  OVER 1; INVERSE 1;cx,
cy
640 RETURN
650 LET q$=INKEY$
660 IF q$<>" " THEN  GO TO 650
670 RETURN
680 CLS
690 FOR i=1 TO cl
700 PRINT "Enter colour (1-7) f
or point ";i
710 INPUT c(i)
720 NEXT i
725 CLS
730 RETURN
2000 PAPER 7: INK 0: BORDER 0: O
VER 0: BRIGHT 0: INVERSE 0: CLS
2010 PRINT AT 0,5;"I N S T R U C
 T I O N S"
2020 PRINT AT 0,4; OVER 1;"_____
____________________"
2030 PRINT AT 3,0;"With pattern
generator you can"'"make complex
 patterns from dots"'"or shapes.
"'"While the computer is drawin
g,"'"the keys are as follows..."
'"    'A' bends the trail upwards
"'"    'Z' bends the trail downwa
rds"'"    'N' bends the trail lef
t"'"    'M' bends the trail right
"
2040 PRINT "    'Q' changes direc
tion of dots"'"    from left to r
ight"'"    'W' changes direction
 of dots"'"    from up to down"''
"    'S' freezes the pattern on"'
"    the screen,<SPACE> unfreezes
"
2050 PRINT )0;"Copy to ZX Printe
r (y/n)?"
2060 IF INKEY$="y" THEN  COPY :
GO TO 2090
2070 IF INKEY$="n" THEN  GO TO 2
090
2080 GO TO 2060
2090 CLS
2100 PRINT AT 3,0;"    'D' Saves
pattern to tape in"'"    screen$
format"'"    'C' Copy pattern to
  Printer"
2101 PRINT "    'R' goes to start
 of program"
2110 PRINT "The pattern complexi
ty defines"'"how many trails of
dots there"'"will be."
2120 PRINT ''"For the best resul
ts choose the"'"same colour for
each dot."
2130 PRINT )0;"Copy to ZX Printe
r (y/n)?"
2140 IF INKEY$="y" THEN  COPY :
GO TO 10
2150 IF INKEY$="n" THEN  GO TO 1
0
2160 GO TO 2140
```







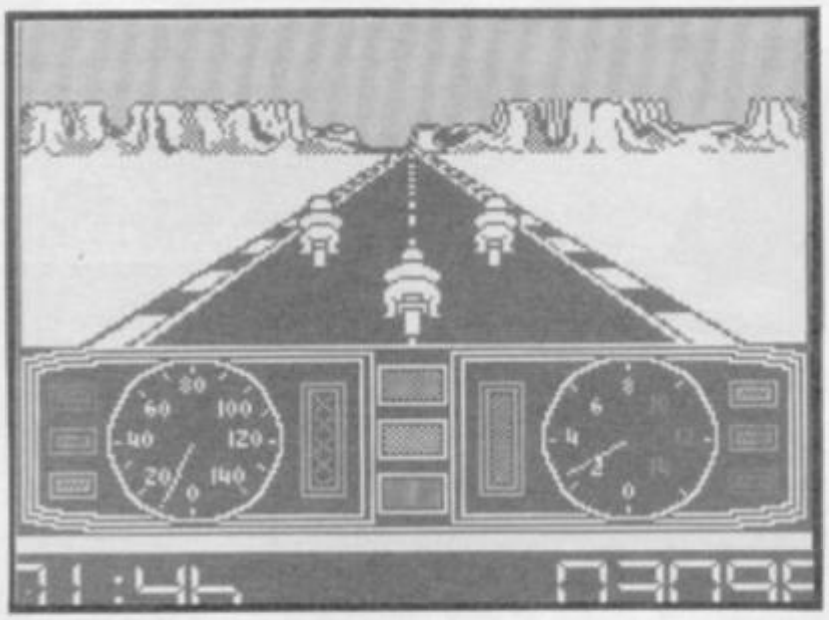
SUPERCYCLE

STRATEGY SIMULATION REVIEW

Cranking the machine beneath me up to 140 mph I broke out of the bend and rocketted away from the other riders, up the long straight. The surrounding scenery blurred into coloured smudges as the bike hurled itself forward, stretching every cylinder to breaking point.

I reckoned I was doing really well, because it takes a fair bit of imagination to get that excited about **Super Cycle**.

The game was initially programmed on the Commodore in the States by Epyx, the people who brought you the splendid **Games** series of sports simulations. Now it's been converted across by US Gold and, compressed from a multi-load 64K program to a single-load 48K.



And as might be expected, it's a disaster.

Not really a surprise then to find the conversion's been done by Ian Weatherburn who's responsible for other dodos like Ocean's **Highlander** and **It's a Knockout**.

Super Cyle is really **Pole Position** on bikes.

Finding yourself on the grid, flanked on either side by a mysterious rider – looking exactly like you – the clock begins to tick, and you're off.

"Racing has never been so furious" burbles the text. rubbish! Even more ridiculous is the statement: "Push it over the limit, and you crash."

It's almost impossible to crash. You can ride right through other players without any fear of even being bumped a bit. The only way I found to crash was to ride straight at one of the big signs on the side of the road. This is not the mark of a good game is it?■

FACTS BOX

A major disappointment. Everything is just very, very adequate. Epyx should try to get its name taken off it

SUPER CYCLE
Label: Epyx
Price: £7.95
Memory: 48K/128K
Joystick: various

Reviewer: Ian Douglas

★★★☆☆

GOLF

It's been a while since I've donned the plus fours and strolled out on to the greens of my Spectrum, but here comes Imagine, determined to prove that there's life in an old genre yet.

Golf simulations have been around since the start of home computing, but today's programs push their predecessors into the pitch-and-putt league.

Whereas once a round of ball-bashing consisted of nothing more than guessing the angle needed to connect Point A (the ball) to Point B (the hole), now you even get an animated golfer taking a swing.

As you might expect from a Konami conversion, **Golf** is strong on these graphic touches. Before you even leave the clubhouse you'd better realise that you're going to spend half an hour choosing all the variables before you can drive off into the undergrowth.

Everything is very smoothly run around the Konami course.

First thing to do is decide what sort of game you're going to play. If you're on your own you're restricted to stroke play. That means that you'll try to beat the number of strokes that it should take to complete a hole – the par.

None of the hole ratings are impossible, but you'll need to play well to complete the course without at least a stroke or two too many.

Add an opponent and you have an alternative to taking on the course. Match play is a simple fight to the finish, with the player who takes fewest strokes winning the hole. Five holes give you the game.

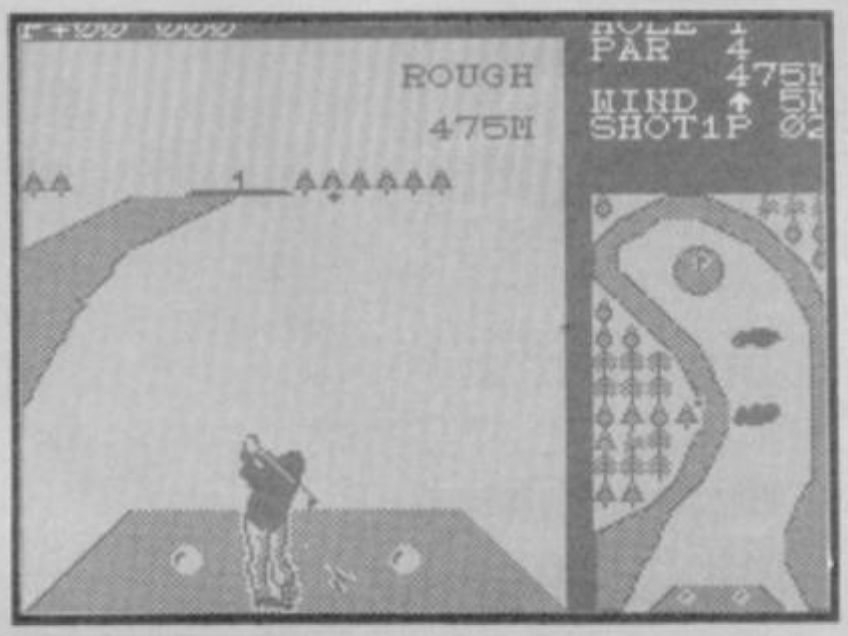
HINTS AND TIPS

- At first just drive straight and take notice of the club strengths.
- Only compensate for the wind if its speed is four mph or more.
- On certain holes it may be better to go for a shorter first shot, rather than risking driving straight into a bunker.
- On the green, too little is often better than too much

First, take notice of the wind speed and direction. When you place the direction of your shot with the cross-hair cursor, you may need to compensate for the force nine gale that's blowing across the scene. At this stage you also choose whether to slice, swinging to the right, hook, curve to the left, or send the ball straight down the middle.

Pressing *Fire* takes you on to club selection. One advantage that micro golfers have over their real-life counterparts is an accurate measure of how far they are from the hole. Using the inlay card's guide to the average length of shot given by each club, you can ask your caddy for a number nine iron without fear of fits of laughter.

Finally, you have to make the shot, and its strength is controlled by the time honoured method of a bar, which expands and shrinks just fast enough to make selecting the right moment that bit tricky. Hit *Fire* and shout 'Fore!' It's the moment of truth as you watch your shot in 3D on the left and in a plan on the right.



When you finally make the green, the picture changes. Instead of the scene you get an overview of the area, complete with grass to help you judge which way a stroke is likely to roll. Too weak and the result will be a puny embarrassment, but too much and you'll overshoot the hole.

There you have it in a nutshell. This is one of the smoothest golf games I've seen and it's ideal if you fancy a nice relaxing round of non-exercise from your armchair.

But I can't help wondering if the limited number of holes won't also limit its life ■

FACTS BOX

More attractive arcade-style than awesomely detailed, but for an undemanding game it can't be beaten

GOLF
Label: Imagine
Author: Choice
Price: £7.95
Memory: 48K/128K
Joystick: Kempston, Sinclair, Plus 2

Reviewer: Jack Lant

★★★★★

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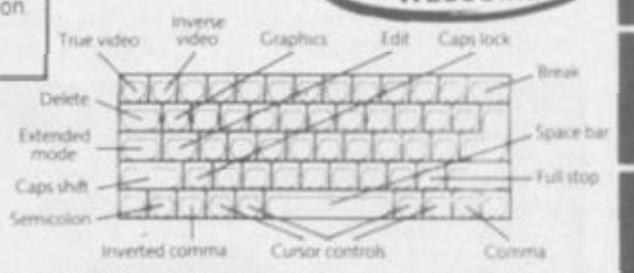

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COMPILATIONS

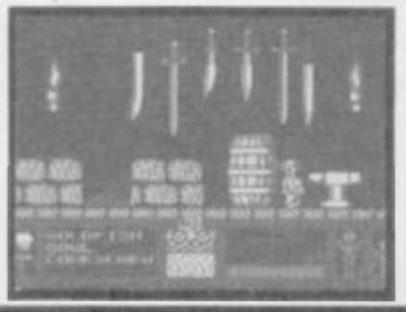
SOFTWARE REVIEW

5 STAR GAMES

Just when you thought it was safe to go out and buy the full price mega-game that you saved up for, look what happens – Beau Jolly goes and releases the sort of compilation tape that is impossibly difficult to resist. Isn't that typical? Now you don't know what to do.

I know what I'd do though, for me, **Five Star Games** is a smashing release with five games that I always thought were some of the best quality software hits of last year.

Included in this revered collection are two of your very own SU Classics namely **Three Weeks in Paradise** from Mikrogen and **Back to Skool** that zany sequel to **Skooldaze** from Microsphere.



If you then add to these the masterful **Zoids,** the classy **Spindizzy** and the highly acclaimed **Equinox,** you have a compilation that is great value in anybody's eyes.

Back to Skool I enjoyed tremendously. In fact I hold the world record for amassing 10,000 lines in the game. The storyline is all about trying to return your doctored school report back into the Heads' safe without him noticing.

Spindizzy, although being a **Marble Madness** clone, is the best example of how to copy a good idea. It is very playable, and has enough differences to **Marble Madness** to really stand alone in its own right.

Three Weeks in Paradise is a 'Wally' game. This time he's in the jungle looking for his loved ones, Wilma and Herbert, who've been captured by natives. The large graphics are a pleasure to watch and the game itself is pure entertainment.

Zoids caused quite a stir when it was first released and seasoned hacks lined up to pay tribute to the game. Not only are you joined to a Blue Spiderzoid in the battle with the enemy, the red zoids, but also with your own mind as your own Droid's defense systems may effect your decisions if it feels threatened. A hell of a lot is packed into 48K of this game.

Finally, there's **Equinox,** a maze-like graphic adventure-cum-platform game, which is simple to learn and yet fiendishly difficult to solve. It's all about collecting radio-active cannisters from numerous levels before they blow up.

Forget that mega-game. Go and buy **Five Star Games** – you won't regret it■

FACTS BOX

A terrific value-for-money compilation packed with hits. Five great games for the price of one.

FIVE STAR GAMES
Label: Beau-Jolly
Price: £9.95
Memory: 48K/128K

Reviewer:

★★★★★

UNBELIEVABLE

ULTIMATE I

Once upon a time, Spectrum computers didn't have 128K memories. Some had 48K. Some even had only 16K.

And in those dim and distant days programmers were still discovering how best to use those limited kilobytes. Now some slaved away in their bedrooms, churning out those old **Invaders** in Basic, while others pushed forward, producing new and exciting programs.

It was about this time that Ashby Computers and Graphics became a legendary name. "Ashby who?" you ask. Agreed, it is a bit of a mouthful, which is probably why they changed it to Ultimate, a word which became synonymous with Quality!

Now newcomers to Spectrum computing (Hi – what kept you so long?) and veterans possessed of short memories can re-live those pioneering days with two compilations of the Ultimate hits.

Unbelievable Ultimate I takes off with **Jet pac** the game that transformed Spectrum software. Now it looks rather old-hat with the plot of picking up objects while blasting the nasties, and it's restricted to single screens. However, it's fast and furious, so it should fill an hour or two.

Tranzam is a driving game, and again it's no doddle. You steer your car, which is seen from above, around the good ol' US of A, avoiding obstacles and the Deadly Black Turbos while picking up petrol and cups which litter the landscape.

Lunar Jetman sees the return of the hero from the earlier game, and when it came out many reviewers thought it was just too difficult. I'm inclined to still go along with that, though die-hard dodge and shooters should have a field day.

Finally, **Pssst!** No, I'm not being crude. That's the sound of the aerosol bug killers in a shooting game where success, in the shape of a blooming bloom, depends on choosing the right coloured spray.

The four games may look a little unsophisticated now but they were state-of-the-art way back when. Go grab yourself a piece of programming history■

FACTS BOX

Stepping back in time with four of the early Ultimate greats. Includes Jetpac the program which started it all

UNBELIEVABLE ULTIMATE I
Label: Ultimate
Author: in-house
Price: £9.99
Memory: 48K

Reviewer:

★★★★☆

UNBELIEVABLE

ULTIMATE II

By the time of Atic Atac, Ultimate was well on its way to fame. It's the first title on Unbelievable Ultimate II.Much imitated, it's a giant maze game, set in a haunted house, with lots to pick up. Added interest comes from your ability to choose different types of hero.

Sabre Wulf has also inspired programmers. This time the maze is a series of jungle passages, inhabited by a variety of foes, some of which are best avoided. It's a huge game and possesses the Ultimate trademarks of great graphics and good humour.

Sabre Man crops up again in Underwurlde, which even improves on his first outing. Here he's seen sideways and he runs and bounces about a series of rooms and caves, swings on ropes and floats on hot air bubbles.

Of all the Ultimate games, Alien 8 was the one that had most influence on the programming world. This was the game that introduced the solid 30 view, seen from above. Everything from Sweevo's World to Batman owes a debt to the antics of this little android, and even if some of the techniques used here have been refined since, the game's still got a lot of ingenious puzzles.

On the whole Ultimate in its hay-day did get it right, time after time. With four games for a tenner, you can't grumble if you want fast action and undemanding scenarios■

FACTS BOX

The better of the two Ultimate compilations. Produced when the firm was at its peak. Includes the classic Alien 8

UNBELIEVABLE ULTIMATE II
Label: Ultimate
Author: in-house
Price: £9.99
Memory: 48K

Reviewer:

★★★★★

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JOHN PICKFORD AGE 19

"I think I first saw a computer at school, it was a Tandy TRS 80. I learnt to program the usual boring route – bought a ZX81 wrote some games in Basic (a version of **Hangman** to kick off with) and moved on the Spectrum. Getting into machine code was a mixture of William Tang's book *Spectrum Machine Code for the Absolute Beginner* and necessity. When I joined Binary Design I just had to learn fast. I guess the first game I produced that I am still proud of is **Max Headroom**."

VITAL DETAILS

Favourite programmers
Steve Turner with Quazatron and Bo Jangeborg
Favourite Program
Elite
Arcade game I get the highest scores on
Battlezone, probably
Program you would most like to have written
Knight Lore
Greatest achievement
Actually it's a windowing routine system for the Spectrum which works a bit like the Amiga
Favourite TV programme
Cheers, in fact most of those American sit-coms on Channel 4
Favourite film
One flew over the Cuckoo's Nest (and all the Python films as well)
Favourite Album
Housemartins' latest album: Hull 4 London 0
Favourite book
Hitchhikers Guide to the Galaxy
Worst program that has ever been successful
Word Cup Carnival. I didn't like Lightforce much either
Hobbies
I don't seem to have time for any – when I'm not actually programming I'm designing games for Mastertronic
Best thing about the Spectrum
It's very flexible – there is usually some way of doing almost anything you want even if it's usually very difficult to find
Worst thing about the Spectrum
The sound
Coming up:
I'm working on a game called Amaurote with, Isometric graphics and 2,000 screens and it's all to do with colonies of insects – each type will have a special job
SOFTOGRAPHY: GHOST TOWN (VIRGIN 1984), DEATH WAKE (ARGUS 1985), MAX HEADROOM (ARGUS 1985), GLIDER RIDER (ARGUS 1986), ZUB (MASTERTRONIC 1986)

JOHN Pickford is a pretty hot programmer. He created Max Headroom for Argus, and topped that with Glider Rider. Now he brings us Zub possibly the best budget game ever. We ask him the usual questions■

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REVIEW

YOUNG PLAYERS' TRIVIAL PURSUIT

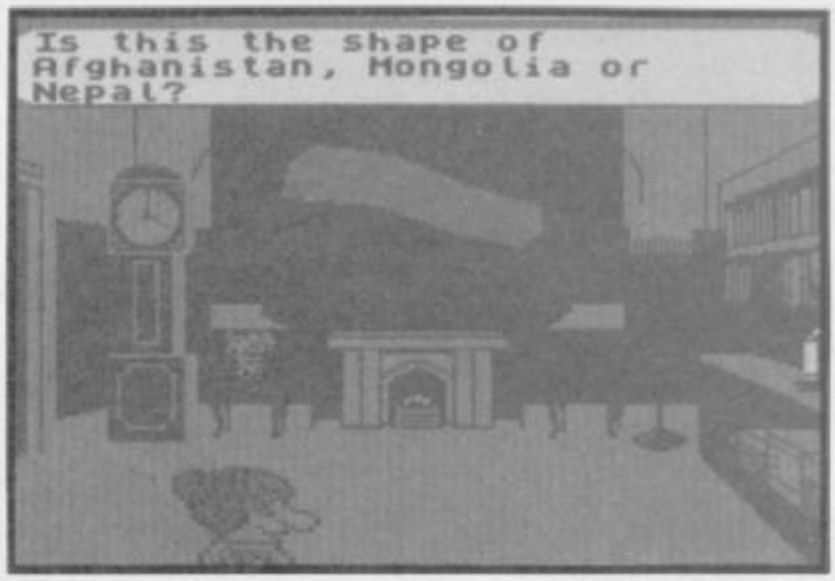
You don't need to be a genius – or Genus – to play **Trivial Pursuit – Young Players' Edition.**

Like its big brother – launched a couple of months back – it contains 3,000 questions on two tapes but this time it's for people who've heard of Spandau Ballet or Duran Duran. Do you know whether a lake on Mars would boil or freeze, or which organ of your body is bean-shaped?

If you've played the Genus Edition you'll find no differences between the two master games. Both include the same score panels and board design. TP, the lovable (?) question master with the big nose is still as cheeky (irritating?) as ever and you've still got to be honest as to whether you've answered the questions correctly.

All that's changed is the question set. All the posers (not the players, you fool) are new – more in keeping with the youthful theme. There are, for instance, questions on Sports and Hobbies, Good Times (sic), and the natural world. If you already own the Genus Edition those questions can be purchased on one of Domark's new **Uniload** cassettes. The same cassette will load into most of the popular computers so, if you've got a Commodore or Amstrad machine as well as a Spectrum – with one of the master games – you can play it on all your machines.

Baby Boomer is, apparently, on its way with more questions next month. I just can't wait■



FACTS BOX

More questions, more categories, but the master game is the same. It's still a fabulous game

Label: Domark
Author: ODE
Price: £14.95 (£7.95 questions only)
Memory: 48K/128K
Joysticks: various

Reviewer: John Gilbert

★★★★★

GALLIPOLI

Gallipoli is the latest in a long line of wargames to be released by CCS.

During the First World War, Turkey was allied with Germany and Austro-Hungary. The British made an amphibious landing in the Dardanelles in an attempt to force the passage to the Black Sea and so link up with the Russians.

The campaign, which has gone down in history as Gallipoli, was an unmitigated disaster. The British and ANZAC – Australia New Zealand Army Corps – forces became bogged down in a static trench warfare which was as bad as that on the Western Front, in Flanders.

On to the game. There are options for one, two or three players. If only one plays, he or she commands the British and ANZAC forces, and the computer playes the Turks. With two players, then you split up the allied forces into two commands and play against the computer-controlled Turks. In the three-player version, people play all three commanders.

Once you've made your choice, the map comes up.

Here's the big disappointment: it's not one of the best maps I've ever seen. In fact, it's positively garish. Beaches are yellow, open ground is green, low hills are an odd pattern, hills – the pattern shimmers all the time, and is very difficult to look at. I tried adjusting my set, but to no avail.

Although not drawn on the screen, the map is divided into rectangles. To move, you position the cursor above the unit you wish to give orders to, press *Fire*, move the cursor to hwere you want the unit to go, and press *Fire* again. You have to do this every turn for every unit.

You don't have to order a unit to move. You can tell it to dig in, or interrogate it to find out how many men it has, what its morale is, whether it's entrenched or not and so on. This information is flashed up beneath the map window.

Once the movement phase is ended, the Turks move. You don't actually see them doing so – you just get a text screen saying so.

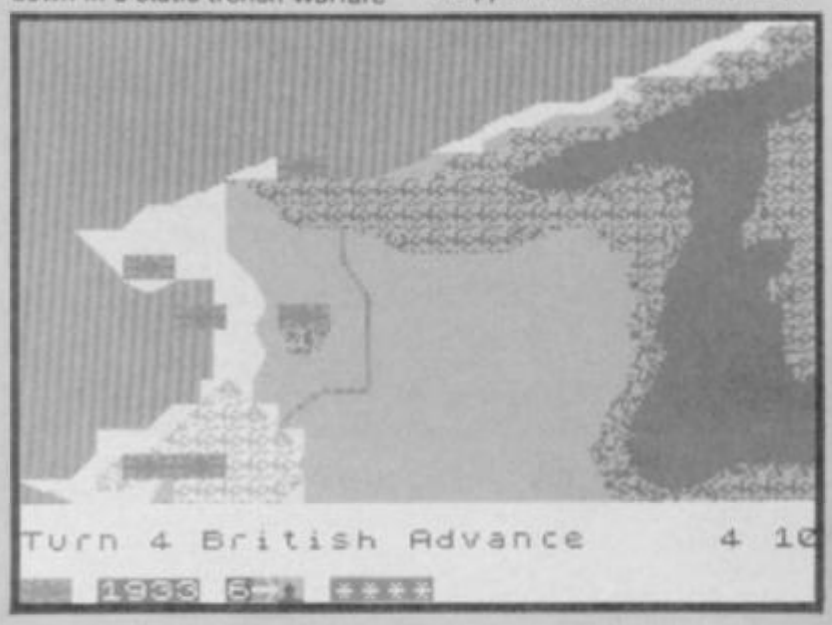
Next you get to attack. The map returns, and you can order any of your units which are *adjacent to enemy units to* attack. Unfortunately, it's difficult to tell when units are adjacent – it turns out that they can be adjacent even though a unit-wide space separates them.

Units are 2,000 strong at the start of the game. As they are involved in combat, they take losses off that strength. Typical losses inflicted seemed to vary between 40 and 110 depending on the strength of the attacked and terrain considerations, but it still looks like a long drawn-out slog.

The problem with the game lies in the conception. The actual campaign was bloody and hard fought.

Reduced to a computer game, it becomes boring. All you are doing is repeating the same actions for 23 turns for thirty or so units.

I'm afraid that I very quickly lost interest■



FACTS BOX

Worthy but dull. Just like the campaign it's an attempt at a quick kill which gets bogged down

GALLIPOLI
Label: CCS
Author: in-house
Price: £9.95
Memory: 48K/128K
Joystick: various

Reviewer: Gary Rook

★★★☆☆

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ACROJET

Acrojet is one of those programs which was a big hit in America on the C64, which has now been converted across to the Spectrum, and which makes you wonder what the fuss was all about.

What the fuss was all about was supposed to be the 'unique perspective' you get on the action and the ultra-realism of the simulation.

The new view of things turns out to be that you watch the flight action as though viewing it from a plane behind the one you are controlling. The realism is a little difficult for me to comment on but I can say there are a quite astounding number of play options and it was quite a while before I could get the damn machine off the ground. And there's another mark of a program that (maybe) takes itself a little too seriously – no shooting at all.

If you want variety though it's here. An acrojet is a special type of jet stunt plane and there are hundreds of permutations of

event, event conditions, skill, beginning from airborne or ground and so on. Screens and screens of the stuff to wade through before you get to the actual playing screen. I found it deeply irritating (and, for what it's worth, ugly to look at – like double-entry accountancy. I'm sure there's another joke in there somewhere).

The name of this game is acrobatics. You select a particular manoeuvre – like flying a certain pattern between pylons for example – each of which is graded according to difficulty (just like gymnastics really) and with a time limit. Then you try to get the jet round the course.

The actual look of the program is reasonable though most of the time the plane you are flying lacks much recognisable detail (it depends on very much on its flight position) – so much so that I spent about fifteen minutes

SWORD AND

FACTS BOX

Terrific wargame based on a sort of Kingom varient. Very addictive in a strategic kind of way. Not for arcade fans

SWORD AND SHIELD
Label: Black Knight
Price: £5.95
Memory: 48K/128K

Reviewer: Gary Rook

★ ★ ★ ★ ★

Sword and Shield is a fascinating wargame that looks at first glance like one of the old games that used to be hidden away in the deepest recesses of mainframe computers' memory banks.

Remember the one – you rule an area of land, and you have to grow enough food to keep your population alive, otherwise they rebel and depose you? Well, this is that, but with knobs on.

You, Duke whoever you are, have to collect over 1,000 groats from the groaning, down-trodden peasantry. To help you, you have a force of knights and infantry. Unfortunately, on the other side of the map is a computer-controlled duke – and he's going to fight you for control of territory.

The map is green, with rolling hills, peasant villages, woods, roads and so on marked on. Also shown are forts, either yours or the enemy's.

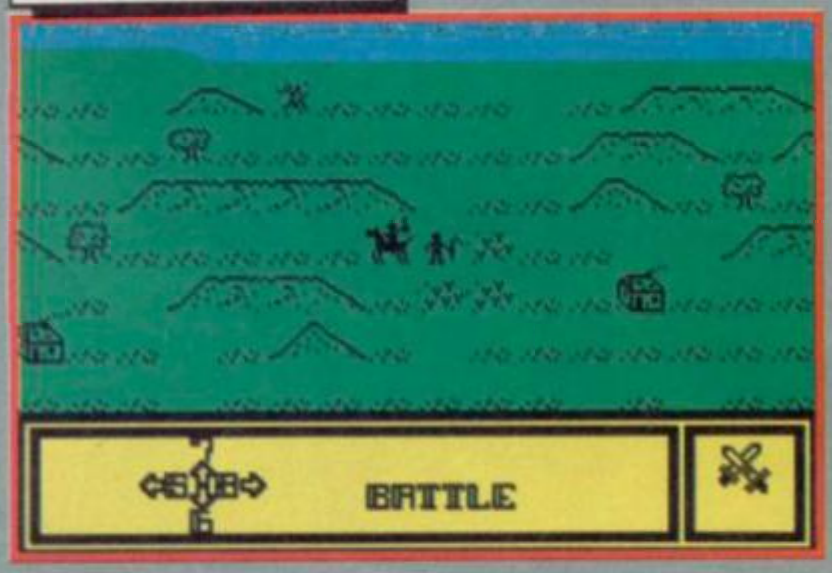
Every year, you'll be told the amount of crops grown. You tax the peasants from 10% to 90% – but the more you tax them, the more of them rebel and become bandits. By moving one of your knights next to a peasant, you can conscript him as an infantryman, but the more peasants you conscript into your army, the less are left to till the land and grow crops – and pay taxes.

You move the troops under your control by giving them a direction and telling them how fast they should move. Until you order them otherwise they continue to follow those orders – unless they run into a tree, hill etc.

When you try and occupy a square that already contains an enemy piece, a battle takes place. What happens is anybody's guess – I haven't worked out how to find out yet. There is treasure dotted about – you should try and collect this (obvious, huh?), but somehow I don't think it's going to be as easy as it looks.

What else? Oh yes, the dragons. Dragons are bad news – they eat people. You can have up to four on the map at the same time, and you really should avoid them like the plague.

At the year end, you use some of the cash you've



FACTS BOX

Highly elaborate and accurate simulation of an acrobatic jet. Unspectacular though. Only for hard core simulation fans

ACROJET
Label: US Gold
Author: Microprose
Price: £7.95
Memory: 48K/128K
Joystick: Sinclair

Reviewer: Graham Taylor

★★★☆☆

hurtling straight off the end of the runway having mistakenly turned the plane around because I thoughts it was the wrong way around (get the picture?)

Having flowing the plane around finally and even gone round the odd pylon (the easiest of the tricks to do) my view of the program improved a bit but really I still think I'd get bored fairly quickly. **Acrojet** may well be fairly realistic, certainly there are a fair number of controls to master, and it should be given some credit for being a different sort of flight simulation – both because of the cameras'-eye view and the Acrobatic theme.

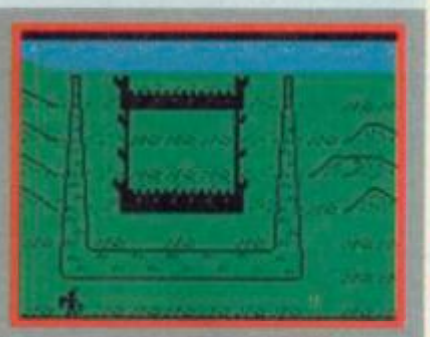
I'd say this though, the graphics aren'tr anything special and I think only those people who rate a flight simulation only in terms of the realism of the simulation only in terms of the realism of the simulation will really enjoy it long term.

If your real taste is for a bit of airborne death and destruction you should avoid it■

SHIELD

your treasury to buy new troops, either knights or infantry. You can also buy a farm – which doesn't refer to the American euphemism for dying – but means simply that you add one agrarian smallholding to the list.

And that's it. Quite a lot of information to digest in a review, and far more to digest when trying to play the game



the first couple of times. I suspect it's going to be a long time before I get anywhere near beating this thing. But at the same time, it's pretty compulsive – you always believe that next time you can do it – until you try, that is.

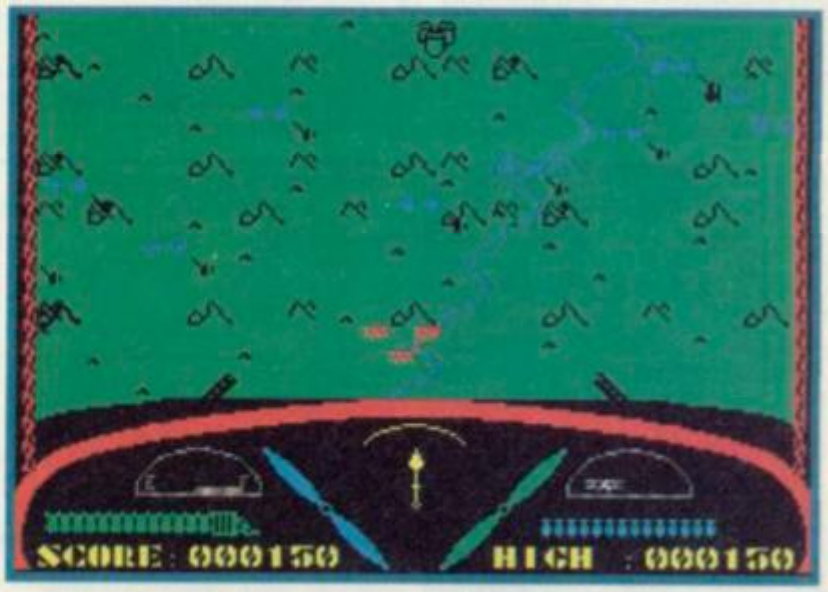
Any real complaints? Well, the only thing that bothers me that much is the fact that it's very difficult to tell the various pieces apart. Yes, I know that the instructions say that your troops, being good, always face to the right, but *sometimes it's* tough telling exactly which way a character is facing.

You can save games either to tape or to Microdrive, so you can resume a long game you've had to abandon later on. This isn't the sort of game you're likely to finish in half an hour. The final verdict is a definite thumbs up. The graphics are good, although a little unclear at times, and the gameplay works really well once you get the hang of it■

STRATEGY SIMULATION REVIEW

Gott in Himmell vot iz zis? Ze bloody Red Baron has gone too far zis time!! One minute he is firing away at ze dreded British, zen he makes way for suicidal black bombers and Blue Maxes. Whatever next!

Well what comes next in Deep Strike, is a chance to blow away the Bosch using your bombs, when you finally arrive at your designated destination, which happens to be a convenient fuel dump.



You're in control of World War I fighter plane, escorting four bombers and it's your job to both protect and guide the bombers to their target.

The terrain is very similar in layout to Combat Lynx and the enemy planes come out from all angles at you.

Keeping on the right flight path is not difficult, but avoiding hills is, and too much hill hitting results in a broken propeller and we all know what happens next!

There are black planes that just fly straight at you bombers so avoid those at all costs, and the Blue Maxes are very accurate so shoot them as soon as possible.

If you manage to survive all this heat, you'll come across the fuel dump so bombs away and it all starts again.

It's quite good fun initially, but very overpriced. Certainly not worth a tenner.

FACTS BOX

A really average shoot 'em up simulation that never really gets off the ground. And it's overpriced too.

DEEP STRIKE
Label: Durrell
Author:
Price: £9.95
Memory: 48K/128K

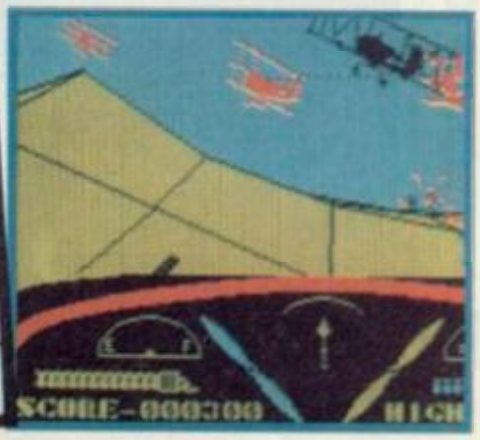
Reviewer: Andy Moss

★★☆☆☆

DEEP STRIKE

The game loses its edge aftera while, there isn't really enough in it to keep you hooked, pretty soon I began to lose interest. Actually I got more fun out of shooting my own bombers into oblivion than the Jerries!

The graphics are very pretty, the sound is fair, its just , is that all there is? ■



1987 · PREDICTIONS ·

Forward looking, as ever, SU asked the software industry's seven giants (!!) if 1987 would be snow white...

Fergus McNeill: Delta 4

Clement Chambers: CRL

David Ward: Ocean/Imagine

1	*What hardware developments would you most like to see on the Spectrum in '87?*	Standard disc drives for the Spectrum, so that people can produce disc software.	A CD Rom Interface. It won't happen of course.	A +2 that works
2	*Do you expect to see more specifically 128K software in '87?*	Yes 'cos we're doing some.	Generally no, not until late in the year, CRL is going to be doing quite a lot of 128K stuff however.	Well that all depends on the answer to question one. We are developing specifically Spectrum 128 software but basically we need a user base of 300,000 to 400,000 machines.
3	*Which other computers would you expect to do well next year?*	Well I think the Amstrad CPC won't do well. The Plus 2 will, Commodore will get its prices wrong and the Amstrad PCW8256 will continue to do well.	The Amstrad IBM machine and I think this is the year for the Atari ST. If Commodore were to launch a baby Amiga at a sensible price that could be a winner too.	The Commodore 64 should be OK. The Amstrad machines will do OK in Europe. The ST will do well. The games consoles won't be big until Christmas because they are being marketted as toys.
4	*Do you expect the Spectrum market to grow significantly in '87?*	No it won't grow, it'll stay about the same.	I don't think it will grow much, it's an old machine and I don't think the Plus 2 is going to be much of a success in Europe.	It could grow; it all depends on question one.
5	*What price would expect the Spectrum Plus 2 to be by Xmas '87?*	£129.00.	I think it will be down to somewhere between £110 and £120.	Amstrad will keep it about the same but there may be some extra free goodies.
6	*Which software company (other than your own) will grow fastest next year?*	Piranha are about the only new software house that look like doing well, Durell having been doing quite original things for a while – they could grow in '87.	Mastertronic will get even bigger. I'd expect Hewson to move up from the top of the second division league strongly into the first division.	I don't think there will be many more software houses in the old sense. What there will be is software developers – teams of people creating software for publishers.
7	*What new developments if any do you expect to see in Spectrum software?*	I don't know. Maybe there will be something original for a change, maybe some of the people who produce boring stuff will be forced to try harder.	The biggest thing will be sound – sampled music and sample speech and three channel music on the 128 machines.	Well if we get a 128K user base we could see radically different software. The new games we are doing for the 128K are a complete departure from 48K, a different genre.
8	*Predictions on software prices?*	Well it seems that any price less than £8.00 and more than £2.50 confuses people so I think the big split between Budget and Full Price will get bigger.	Down down down. The £9.99 will become too much, it will drop down first to about £7.95 and maybe beyond that. The Budget market will get bigger.	I don't think it will change much it may drop a bit but I don't see a tremendous amount of pressure for that to happen.
9	*Best thing that could happen in the industry in '87*	If somebody blew up US Gold, Ocean and that whole conglomerate. It would be nice if some other companies could get a chance.	I'd like to see an innovative new machine – perhaps by Sir Clive put out at a Spectrum Price tag.	I'd like to see some support in the TV media for this industry. I don't know the figures exactly but this industry could be worth 25 million in exports.
10	*Worst thing that could happen in the industry in '87*	People could carry on doing what they appear to be doing now i.e. take themselves too seriously and make the industry turn into the music business and get unfriendly and hateful.	Amstrad could pull out of home computers and Commodore could go bust. There could be a new craze among kids that has nothing to do with computers.	The worst thing that could happen is Amstrad's romance with the stock market ends and under pressure Sugar decides to abandon the whole home computer market.

▪ 1987 ▪ PREDICTIONS ▪

	Rod Cousens: Electric Dreams/ Activision	Steve Wilcox: Elite	Mark Strachan: Domark/Streetwise	Andrew Hewson: Hewson
	I don't anticipate any major developments but I'd like to see a cheap disc drive – it would stimulate software development.	It's difficult to see – I think to be really interesting we'd need a Spectrum compatible computer that was also radically different – probably operating in two modes.	I'd like to see a volume control on the Plus 2 for the tape machine, a cheap standard Amstrad disc drive.	I would like an official disc drive very much please.
	Yes. I think the 48K development has gone as far as possible and the 128K market will be a very active one.	I think there may be 128K software in the second half of the year but for the first half it wll just be enhanced versions of 48K games.	We followed the 128K quite closely in the beginning but at the moment I just don't think there is a big enough market for 128K only products.	Yes because the 128K +2 is going to sell very well at Christmas.
	Commodore should hang on with the 64 and possibly a baby Amiga. An Atari ST for £199 would be a very attractive product and later on in the year we will see the games machines.	I think the existing machines will do well, including the Amstrad CPC. The Atari ST and the new games consoles should also do well.	I think the trend towards larger machines is finally happening, especially the Atari ST and in America the Amiga. I see some signs of a falling off in sales of the Amstrad CPC.	The Atari ST may do quite well not so much because of the predicted price drop but because of better marketing. The Commodore 64 will still be around.
	It won't actually grow in size it already has about 30 to 40% its more a question of activity – because of the new machine I'd anticipate sales to be strong.	It won't grow. I think it will just remain stable. Certainly we will continue to support it.	Yes. It will grow, but the people using it won't remain the same, people grow up and pass machines on. Generally I'm bullish about the future though.	It will grow, but much although I think the new machine is a very good product.
	Around £100 and certainly no more than £129.95 if the Atari is going be out there for £199.	Well I'd like it to fall to around £100.	I think the price will remain the same – it may drop to £129 but no more.	£149 just like now. It won't change because I don't think Amstrad will feel it necessary to change it.
	The big companies won't become any bigger. Instead second division software houses grow into bigger ones – could be Hewson, Piranha or Gargoyle, if they wanted to.	Piranha have been doing some good things so I'd back them to do well.	I must say it will be a pity if the industry does become dominated by three or four big companies.	Actually Sagesoft will because of the PCW material but in the games market I'd give Firebird a good chance – they have been doing some sensible things recently.
	Nothing really significant unless we get discs – that could change software a lot.	Nothing specific. I'm looking for continuing innovation in every game area.	When we entered the market there was a Jet Set Willy Trend and an Adventure Trend. Shoot-em-ups are coming back strongly. Gameplay is all important.	I'm not telling! We have plans.
	I think prices will hold up although there will be some pressure downwards, the mass market will go budget. The £9.99 tag will have to denote something a bit special.	I think that's interesting. I see a gap at, say, £4.95 for a mid range of software. I think that the £9.95 price bands won't go away but I think there will be fewer titles in it.	There won't be any more budget software houses. I wouldn't want to see a price change for the £7.95-£9.95 range we see now.	I'm bullish, I think even though you get material out on budget which is of full price quality and vice versa the basic price bands will remain the same.
	That it keeps going and there keeps being enough support out there to justify the time effort and expense that go into the best most exciting games.	A reduction in hardware prices – good for obvious reasons and some interesting new hardware.	The best that could happen is that companies could start to realise that they are only shooting themselves in the foot when they market and hype games that are not yet ready.	Difficult, how about this, some UK manufacturer launches a world beating Spectrum based computer with sprites and lots of extra features which does well on a world wide scale.
	Well let's hope the industry doesn't go away or become diluted and that we get rid of piracy.	The worst thing that could happen in 1987 is that Elite will continue to be only the third most successful software house in the country.	If any of the major retailers pull out of software that would be bad. I wouldn't like to see many software houses fail – the more the better. Variety is the spice of life.	Nuclear War. Or a dramatic change in the hardware market which we couldn't quickly follow.

Time waits for no Spectrum

With a real sophis interrupt-driven machine-code clock routine

Well. I suppose I should have expected it! I set up a little competition in these pages a couple of months ago offering a prize for the best interrupt driven clock routine written by a reader. The entries trickled in over a period of a month or six weeks – clearly the competition did not sent you all scurrying to your Spectrum keyboards to get stuck in. A couple of weeks ago I had a look through the entries myself and then handed them over to one of our programmers, Keith Prosser, for a stricter evaluation.

Two days later he came back to me and said that none of the entries got his five star rating and so he had written a routine himself to do the job!

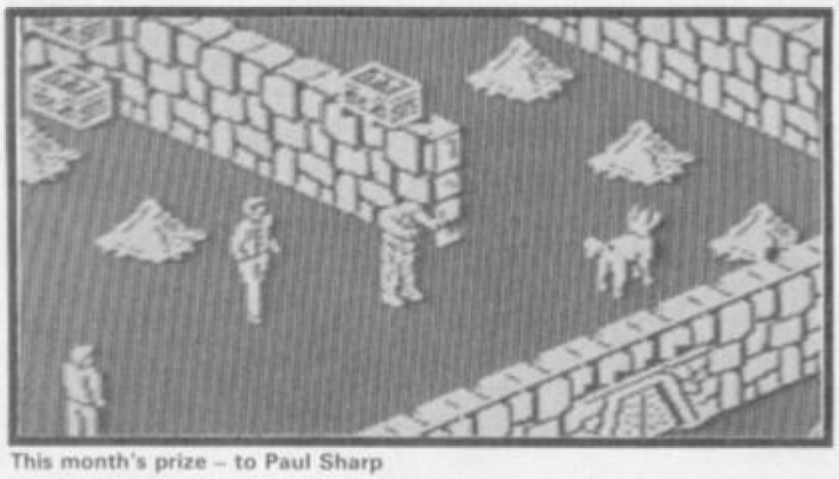
"Aaah". I thought to myself.

"Hmmm". I considered.

"Oooh". I contemplated. "Now what do I do?"

Well, Keith and I sat down and had a look through the entries again and compared them with the original specification which was framed as follows: "... a prize to the reader who sends in the most efficient clock routine. I shall be looking for speed of execution rather than shortness of code because it is very important that any routine which is called fifty times a second does its job as quickly as possible. The routine must count for at least two hours and show hours, minutes and seconds."

In the end I had to agree with Keith that none of the routines was as slick as Keith's and so his is the routine that I have chosen to publish here. Nonetheless the entry from Paul sharpe of Shrewsbury was good enough to do the job and was the best of all entries and so he carries off the prize – a selection of Hewson games including **Pyracurse** written by – ahem – Keith Prosser and A N Other.



This month's prize – to Paul Sharp

Well done Paul. We had a bit of difficulty following your listing but at least it had comments on it which is more than can be said for a couple of other entries'. Your only mistake (and Keith insists that I bring this to your attention) was that you failed to preserve the In register by pushing the contents on to the stack at the beginning of the routine and then popping them back off again at the end.

The entries from John Carter of Stratford and Paul Brown of Wellingborough both rate a mention. John's routine had a nice feature to read the time into a string variable so that it was accessible from a Basic program. This goes beyond my original specification but was definitely a useful thing to do. Paul's routine worked fine but it went wrong if the display was cleared or scrolled which was not good news.

Overall nobody took on the problem as stated – to get the job done in the minimum time and we found that the comments added to the routines were universally inadequate. Keith has attempted to do better on both counts in the routine published in Table 1. Attention has been paid to creating fast code right the way through this routine but it is particularly evident at the end with the *Opchar* subroutine which is used to plonk the digits on to the screen. In this subroutine the same four instructions which put the eight lines of each character pattern on to the screen are repeated eight times rather than incorporating them into a loop. If a loop was used, a counter – probably the b register – would have to be decremented and tested each time round the loop so as to identify when printing was complete. This kind of decrement-and-test is exactly the sort of thing that has to be avoided when time is at a premium but space is not. It is faster and therefore better to repeat the same code eight times (which wastes memory space) rather than decrement-and-test eight times (which wastes time).

If you really wanted to go for minimum execution and memory space was available it would be worth replacing the calls to both *Opbcd* and *Opchar* by writing out the code in full. This is of course very wasteful of space but it save the time taken by both the *Call* and *Ret* instructions.

There are a few general points to be made about writing fast code. These take the form of points to be borne in mind as you are putting routines together. The first is that 8-bit, ie single register, increments and decrements are faster than 16-bit versions which do the same job. Hence, if you have to increment through a counter it is helpful if you can limit the range to less than 255 so that you can use a single register rather than a register pair. Remember *Inc* b is quicker than *Inc* bc.

Table 1. Keith Prosser's interrupt-driven machine-code clock routine

```
C> Recrn

C> Keen
    1  ;
    2  ; interupt driven real   time clock
    3  ;
    4  ; copyright HEwSON 1986
    5  ;
    6  ;uses BCD representation
    7  ; SETS UP A VECTOR PAGE
    8  ; FROM &FE00 to &FF00
    9  ; AND PUTS A 3 BYTE JP
   10  ; INSTRUCTION AT &FDFD
   11  ;
   12  org  &fc00
   13  ;
   14  ; char. def. addresses in ROM
   15  ;
dgte  equ  &3d80; digits
colon equ  &3dd0; colon
   16  ;
   17  ; routine to
   18  ; start clock
   19  ;
setup ld   hl,&fe00; set up
                   FC00 2100FE
   23  ld   b,0; a vector page
                   FC03 0600
       0ld   (hl),&fd
                   FC05 36FD
   25  inc  hl      FC07 23
   26  djnz $-0     FC08 10(FC05)
   27  ld   (hl),&fd            *
                   FC0A 36FD
   28  ;
   29  ld   a,50;initialise 1/50
                   FC0C 3E32
   30  ld   (jiffy),a; sec cntr
                   FC0E4320000
   31  ;
   32  ; put a jump to the
   33  ; clock routine at &FDFD
   34  ;
   35  ld   a,&c3; jp clock
                   FC11 3EC3
   36  ld   (&fdfd),a
                   FC13 32FDFD
   37  ld   hl,clock
                   FC16 21????
   38  ld   (&fdfe),hl
                   FC19 22FEFD
   39  ;
   40  ld   a,&fe  FC1C 3EFE
   41  ld   i,a;intrpt mode 2
                   FC1E ED47
   42  im   2      FC20 ED5E
   43  ret         FC22 C9
   44  ;
   45  ;routine to
   46  ;turn off clock
   47  ;
off   xim  1      FC23 ED56
   49  ret         FC25 C9
   50  ;
   51  ; interrupt routine
   52  ;
clock push afy preserve regs
                   FC26 F5
   54  push hl     FC27 E5
   55  push bc     FC28 C5
   56  push de     FC29 D5
   57  ;
   58  ld   hl,jiffy; decr 1/50 sec. cntr
                   FC2AK21001C
   59  dec  (hl)   FC2D 35
   60  ;
   61  ; finish if not down to 0
   62  jr   nz,exitFC3EK2080
   63  ld   (hl),50; reset cntr
                   FC30 3632
   64  ;
   65  ; incr. seconds
   66  ;
   67  ld   a,(secs)
                   FC32K3A0000
   68  inc  a      FC35 3C
   69  daa; BCD format used
                   FC36 27
   70  ld   (secs),a
                   FC37K320005
   71  ;
   72  ; see if 60 seconds...
   73  sub  %60    FC3A D660
   74  ; if not then finished
   75  jr   nz,exitFC3CK208E
   76  ;
   77  ;zeroise secs
   78  ;
   79  ld   (secs),a
                   FC3EK320007
   80  ;
   81  ; incr. mins
   82  ;
   83  ld   a,(mins)
                   FC41K3A0000
   84  inc  a      FC44 3C
   85  daa         FC45 27
   86  ld   (mins),a
                   FC46K320005
   87  ;
   88  ; test mins as above
   89  sub  %60    FC49 D660
   90  jr   nz,exitFC4BK206F
   91  ld   (mins),a
                   FC4DK320007
   92  ;
   93  ; incr. hrs
   94  ;
   95  ld   a,(hrs)FC50K3A0000
   96  inc  a      FC53 3C
   97  daa         FC54 27
   98  ld   (hrs),aFC55K320005
   99  ;
  100  ; reset after 24 hours
  101  ;
  102  sub  %24    FC58 D674
  103  jr   nz,exitFC5AK20UF
  104  ld   (hrs),aFC5CK320007
  105  ;
  106  ;
  107  ; on exit print hrs,mins
  108  ; and secs.
  109  ; in HHrMMnSS format
  110  ;
  111  ; NB - for maximum speed
```

Icon get it right

Oh dear. I'm wrong again. In the December issue of SU I explained the term "icon" and suggested it was derived from the Russian language. Stefanos Starrides of Larnaca, Cyprus has written to point out that the word comes from Greek in the first place (spelt eikon apparently) and that the Russians also use the word because some of them are orthodox Christians like the Greeks. Sorry for misleading you all and thank you to Stefanos for putting me right. It's funny how these words get about isn't it?

HEWSON HELPLINE

```
; calls to opbcd
; and opchar should be
; made into in-line code
;
;(top right corner)
ld   h,hdgts; hi-byte of
                FC82 2638
; digit patterns
;
ld   a,(hrs); print hrs
                FC84 3A0008
call opbcd  FC87 CD0000
;
ld   l,':colon; print ":"
                FC8A 2ED0
call opchar FC8C CD0000
;
ld   a,(mins);print mins
                FC8F 3A0022
call opbcd  FC92 CD0008
;
ld   l,':colon; print ":"
                FC95 2ED0
call opchar FC97 CD0000
;
ld   a,(secs); print secs
                FC9A 3A003C
call opbcd  FC9D CD0008
;
; restore regs then
pop  de; continue with
                FCA0 D1
pop  bc; normal interrupt
                FCA1 C1
;
jp   38h; normal intpt.   pushes af,hl first
                FCA2 C33A00
;      so start at 38.
;
;
;opbcd prints A as two
; BCD digits.
;on entry:
; DE at screen
; H is high byte of
;   digit patterns
;on exit:
; AF,C and L corrupt
; DE = DE+2
;
opbcd:ld   c,a; preserve A
                FCA5 4F
rrca            FCA6 0F
and  %78; get hi-nybble
                FCA7 E678
; and calc. char. addr
;HL= digits+8*nybble
add  <dgts  FCA9 C680
ld   l,a    FCAB 6F
call opchar; print digit
                FCAC CD0015
ld   a,c; get lo-nybble
                FCAF 79
and  15     FCB0 E60F
add  a; calc. char. addr
                FCB2 87
add  a      FCB3 87
add  a      FCB4 87
add  <dgts  FCB5 C680
ld   l,a    FCB7 6F
;
;opchar prints the char.
; pointed to by HL to the screen at DE
;NB-not a loop for speed
;
;on entry:
; DE at screen
; HL at char. pattern
;on exit:
; DE = DE+1
; A and L corrupt
;
otherld   a,(hl) FCB8 7E
inc  l      FCB9 2C
ld   (de),a FCBA 12
inc  d      FCBB 14
;
ld   a,(hl) FCBC 7E
inc  l      FCBD 2C
ld   (de),a FCBE 12
inc  d      FCBF 14
;
ld   a,(hl) FCC0 7E
inc  l      FCC1 2C
ld   (de),a FCC2 12
inc  d      FCC3 14
;
ld   a,(hl) FCC4 7E
inc  l      FCC5 2C
ld   (de),a FCC6 12
inc  d      FCC7 14
;
ld   a,(hl) FCC8 7E
inc  l      FCC9 2C
ld   (de),a FCCA 12
inc  d      FCCB 14
;
ld   a,(hl) FCCC 7F
inc  l      FCCD 2C
ld   (de),a FCCE 12
inc  d      FCCF 14
;
ld   a,(hl) FCD0 7E
inc  l      FCD1 2C
ld   (de),a FCD2 12
inc  d      FCD3 14
;
ld   a,(hl) FCD4 7E
ld   (de),a FCD5 12
;
ld   b d' incr  screen   address
                FCD6 ?a
sub  7      FCD7 D607
ld   d,a    FCD9 57
inc  e      FCDA 1C
ret         FCDB C9
;
;variables:
hrs  :defb 0       FCDC 00
mins :defb 0       FCDD 00
secs :defb 0       FCDE 00
jiffy:defb 0       FCDF 00
;


WE:AF1Bh(44827)
SP:FCDFh(64703)(19877 bytes)
```

It takes longer for a *jr* instruction to branch to a new address than it does to fall through. This is because it takes the microprocessor time to work out the destination if a branch occurs whereas if it is to fall through to the next instruction it need only increment the program counter as normal. Hence it is quicker if you can arrange tests like *jr, nc* etc so that the routine carries on in line most of the time.

Avoid loops and counters if you can and put code in line where possible (ie don't call subroutines). Don't do the same job twice and keep an eye on registers and flags. Don't write values to them unless you have to.

Finally and perhaps most important of all. It is absolutely vital that you document quick code in great detail. It is harder to write and understand than "ordinary" code and it is harder to debug. Some of the things you must do, like putting code in line to avoid subroutine calls, is clearly contrary to usual programming practice so it is very important that you explain in your documentation not just what you are doing, but also why you are doing it.

Otherwise, when you or anyone else comes to look at it in six months time you are going to find it hard to pick up the threads.

Two last points remain to be made about the interrupt routine itself. The first is that a complete page of memory – 256 bytes – is required for the interrupt vector. Some peripherals, in particular a Kempston joystick interface, put numbers on the address bus which forms the other half of the interrupt vector so assuming that the address bus holds FF (hexadecimal. 255 in decimal) is not good enough. It used to be possible to use a blank page at the top of the Sinclair *Rom* for the vector but since the launch of the Spectrum 128 this has not been possible because this area of the *Rom* has been taken over by the manufacturers. (This by the way is the main reason why some pre-Spectrum 128 software does not run on the new machine.)

Finally it is essential that any interrupt routine preserves all the registers because you never know who is going to be doing what before and after the interrupt occurs. If Basic is running you can get away without preserving the 1X register like Paul Sharpe, our competition winner but that is all.

Clash dance

Matt Ferguson of Barnwood asks: **Can you explain the problem of the Spectrum colour clash please? What is it really? Why do you get it on some computers and not on others? I feel it is a shame that an excellent arcade game such as** Paperboy **has to be converted with the main playing area in blue.**

The truth is Matthew that you get what you pay for. If you spend £20,000 on a fancy new Jaquar car it comes complete with electric windows, a built-in cigarette lighter and the engine barely stretches itself beyond idling speed as it cruises down the motorway at 70 miles per hour. However, if you choose to spend just £5000 on a Mini Metro you have to wind the windows by hand, bring your own cigarette lighter and as the car struggles to reach 70 miles per hour the engine whines in an overworked protest.

What has all this to do with colour clash problems? Well a dedicated arcade machine is to the ZX Spectrum what the Jaguar is to the Metro. Under the 'bonnet' of the average arcade machine there are a lot of extra chips and bits and pieces all dedicated to creating, apparently effortlessly, all the clever sound and graphic effects. When it comes down to it the Spectrum simply can't compete. Unfortunately, the average arcade machine costs a lot more money than the average Spectrum so we have to make do as best we can.

The particular colour problem for the Spectrum is that it does not have a true high resolution colour screen despite the colourful appearance of the display. Instead it has a monochrome (ie two colour) high resolution bit-mapped main display with a low resolution eight colour "filter" superimposed. The monochrome display is controlled by the contents of the display file which occupies addresses 16384 ro 22527. The setting of each bit in the display file controls the setting of one pixel on the screen. This is what is meant by the phrase "bit-shaped" – each bit is mapped to a particular pixel.

Bits are grouped together in eights to form a byte so that *Pokeing* a value into a particular byte will effect the setting of eight pixels. For example the Basic instruction:

Poke 16384 , 255

Will set the first eight pixels at the top left-hand corner of the screen to black. Try *Poking* other numbers into other addresses anywhere in the range 16384 to 22527 to see what effects occur. You will see that the screen area occupy by a single pixel is very small – about the size of a pinhead. This is what is meant by the phrase "high resolution".

The low resolution colour "filter" is controlled by the attributes files which occupy addresses 22528 to 23295. Have a go at *Pokeing* numbers into this area. You will observe that you can only alter complete character squares all at one go. This is what is meant by the phrase "low resolution". as you experiment you will see that you can only obtain at most two different colours on each character square – perhaps a white *Ink* on a blue *Paper* or a black *Ink* on a red *Paper*.

This is the essence of the Spectrum colour clash problem. You can have a lot of fine detail in a picture or graphic but as soon as you try to colour it in you discover that the low resolution colour "filter" makes it difficult to create the effects that you want. The problem is particularly noticeable in computer games because these typically involve moving small, highly coloured objects around the screen.

Unfortunately there is absolutely nothing that can be done about the problem. The Spectrum hardware offers no way round the problem. We are stuck with the Metro and cannot hope to catch up with the Jaguar■

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blows a sparky

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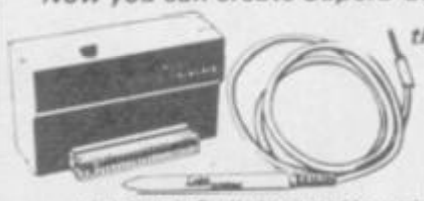

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GORDO'S HELPLINE

MOST of us lesser mortals usually think of the Stock Exchange as the right place for boardroom battles and takeover fever, so when the *Adventurers Club* fanzine and its other services seemed to vanish without trace over the Summer we probably put it down to bad luck or plain lack of interest from the great unwashed. Wrong.

It turns out that a vast struggle took place between the shareholders of the club after a threat of closure from, I presume, the majority owner. Much blood was spilt and many cheques signed until Henry Mueller surfaced as the new managing director. The happy outcome is that the club has now been resurrected, once again offering a full range of services including a regular and quite hefty newsletter, discounted software and a helpline service.

Members who thought they might have seen the last of their subscription cash will be relieved to hear that they'll get everything they expected, as all subscriptions have been extended to cover the lost months.

The October 'Dossier' gives a full explanation for all the problems as well as the regular items of adventure help, programming, readers' letters etc ... Let's hope the Club can continue untroubled to bring us adventurers together. If you've not heard of them before and would like further details of costs, write to The Adventurers Club, 64c Menelik Road, London NW2 3RH or telephone 01-794 1261. They're also on-line as a special interest group on the Hendon Fidonet Bulletin Board (01-200 7577). The board supports V21 and V23 baud standards.

On from here to the excellent and complex

Terrors of Trantoss,

- written by the RamJam Corp and published by Ariolasoft. It's only just been released so this is the first query I've had on this great game. Richard Cullen of Cleckheaton, Yorks has taken the two brothers, each of whom can be operated independently, away from the village at the start and has arrived at the firmly shut Gates of Ganneth: "As you'd expect, I'm stuck here – to get through I need to be able to translate the mysterious runes on them. So far I've found no clue to these at all – any ideas?"

Sure do – the problem is that you haven't yet explored the surrounding countryside enough. After you've got the staff at the ravine you should head S, E, S to the deserted village. Go east to the side of the temple. One of the brothers should 25, 16, 5, 2, 16, 10. The other brother must go into the temple and close the door. Now 17, 26, 3, 5. Pick the small key up, open the temple door and enter and unlock the back door. Here will be found the translation for the runic mystery. Once through the gates of Ganneth, you'll need to make sure of closing them, otherwise the Fanglizard won't let you past.

Some adventures cause more problems than usual. Let's hear it with sympathy for Vince Smith of Crawley: "Since buying

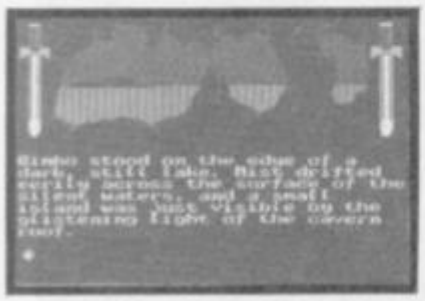
The Boggit

- I've done nothing but overheat my Spectrum and pulled out my hair solving the few problems in this
- delightful game. But try as I might I can't get the bow and arrow off Lard. Be nice –
- help."

In a lengthy printout, Gil and Ran Rimon of Tel Aviv
- provide the answer and a whole lot more. First for our Vincey, talk to Lard when
- you meet him and say hello. To get what you want 1, 16, 7, 22 and also 1, 16, 9. Lard will be ecstatically happy
- and will hand over the aforesaid bow and arrow, dragons for the slaying of.
- For the benefit of all those who aren't remotely near this part of the game yet, I'll

GORDO'S HELPLINE

give you Gil and Ran's solution to the first part of the game – READ AT YOUR OWN RISK O.K.? "Open the chest, climb into it and get the diary. Then climb out, read the card and then get and throw the chocolates. Read the diary and examine the door – the code is 29285.



Drop the diary and go east. Answer Grandalf's question with 'Nothing'. When you've woken up and recovered from your party with the dwarves, go north and start talking. Start with Grandalf and ask him to follow you. Do the same sort of thing with Thorny and the other dwarves. Go east and northeast from here – you're in big trouble now. If you don't type the magic word, the trolls will eat you – the word is Lux.

"When the trolls are dead get the key, climb into the cauldron and get the sword. Get out and go north where you unlock the door to the cave. Open it, go north and collect the rope and key. Go south twice and east twice. North from here is Rivendull. Talk to Smelrond, say hello and make sure you get the free lunch – you'll die of starvation otherwise. Go north and examine the windows in the hall – they give you useful information about the black spiders. Sx2, E, Sx2 to get the credit card. North to get the cigarette which is very important in the future. Ex3 and then IN to pick up the poisoned sandwich – this ties in with the legend of the spiders. Go out and south, get the plastic security card and go back north. Wx2, N and then wait until the goblins capture you."

We'd better stop there in case Fergus McNeil objects to the amount of information being given out – that bulging wallet of his can cause a nasty bruise if you're not careful. Gil and Ran have yet more to offer though, this time some tips on

The Vera Cruz Affair

- "Look Carefully for objects –for instance a black point on the floor could even be a cartridge. The diary is the second important object you find because when you press the space key again after you've got it with the camera, you'll have some important addresses. The most important object though is the pistol, which you must try and get information on from the CRRJ LYON service. After you've discovered something new, try to get statements from all the characters again. Someone's second statement can lead you to the murderer. Make sure you get statements from the neighbour and the caretaker and, when you want Hubert Delroche's statement, simply ask for him by name and say that he can be found in St. Etienne. For the other details and the murderer ... find out yourself!".

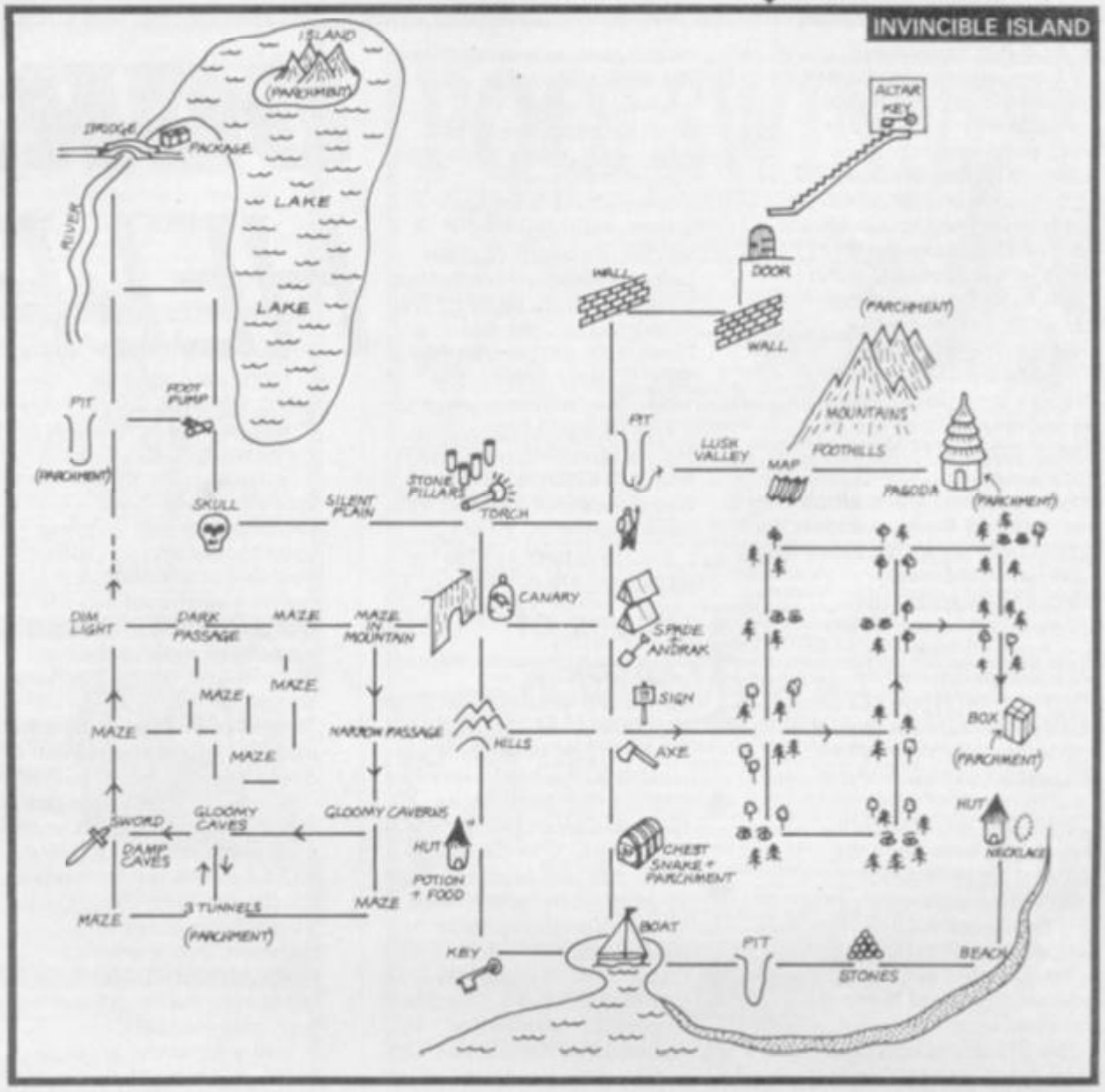
Tony Sheath of Bognor is stuck in

Invincible Island

- His problem is he wants to know how to escape with the treasure – I've found all the parchments but every time I get the treasure the natives catch up with me no matter what I do. "Well, for general help you can all refer to Sandy Duncan's solution and map in this issue but, as far as I recall, you need to have the skull with you before getting the treasure – without it the natives can always overtake you. Try picking it up or dropping it to watch for the effects.
- Solution
W. Take Key. N. Enter Hut. Take Potion. Leave Hut. Take Food. E. Unlock Chest. Open Chest. Drink Potion. Look. Take Parchment. Drop Key. N, N, N. Give Native Food. S, S. Take Axe, Examine Sign, E, E, N, E, S. Take Box. Break Box with Axe. Take Parchment. N, W, W, W, W, N. Drop Axe. S, S, S, E, E, E, N. Enter Hut. Take Necklace. Leave Hut. S, W, W, W, N, N, N. Take Anorak. Wear Anorak. N, N, N, E, N. Enter. Up. Take Key. Examine Altar. D, E, S, W, S, D, E. Take Map. U, U. Take Parchment. D, D, E. Unlock Door. Open door. Enter. Give Native Necklace. Leave. W, W, U, S, S. Drop Phrasebook. Drop Key. Drop Anorak. N, W, W, W, N. Take Footpump. W. Enter Pit. Take Parchment. Leave. N, N. Cross Bridge. Take Package. Examine Package. Inflate Dinghy. E. Cross Lake in Dinghy. Take Parchment. Cross Lake in Dinghy. W. Drop Footpump. Drop Dinghy. W, S, S, E, S, E, E. Take Torch. S. Take Canary. Light Torch. W, S, S, W, S. Take Parchment. N, W. Take Sword. N, N, N, E, E, E, E, S. Drop Canary. Drop Torch. Take Phrasebook. Examine Parchment. Drop Phrasebook. Take Spade. N, W, W, N. Take Skull. E. Dig with Spade. Take Gold. E, E, S, S, S, S. Sail Boat.

The Quickies

- **FAIRLIGHT II:** Coupla tiddlers here, the first from Cameron Heslop of Glenrothes, Fife: "To finish properly just put the book back where you got it after you've killed the last wizard/ wraith. Then instead of the Failed message you'll get the Success sequence."
- And, from another Scot,



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Deathbringer of Ardrossan comes this cheat: "When you get below 10 Lifeforce get hit by a bubble – your lifeforce should then go up to about 250." Try it and see. Also from Deathbringer come the first fifteen spells plus their focus objects from

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Many thanks to all of you for the tips this month and particularly to Tom Frost of Montrose – Ace Adventurer – and Barry Ellison in association with Stephen Biddle, all of whom have sent me solutions to the Zacaron Mystery. I've also received a full run-down on how to get through Moria in 'L.O.T.R.' from Yivgen, Tobor, Noron and Ivian of Madrid. When I've managed to translate it pass it on!

MURDER HUNT: D. Thompson of Preston asks: "Where are the keys for the tractor and how do I put the petrol in? What do I do when I get to the island?" Well, the tractor is a 6 and the only set of keys is for the mill. Be careful with that petrol if you don't want to end up deep-fried – if you strike the matches when carrying it you'll end up very dead, resembling charcoal! The 'island' I'm assuming is the lakeside section. Once you've climed on the boat you should go south – you can walk across the marsh if you're wearing the boots. Then W and 24, 12 to find the murderer – if you have a full potion bottle you should be able to make the villain unconscious. If you haven't, watch out, he's dangerous!

HAMPSTEAD: Richard Van Gils can't enter Chubby's mansion – "I've got the memo and report but when I ring the bell the butler asks what the nature of my business is. What's the right answer?" It's 23, 21 after which you should go south and answer Chubby's question with 'Marry Pippa'. Once you've given him the memo and report you're pretty well there.

VERY BIG CAVE ADVENTURE: In return for the **Hampstead** advice, Van Gils offers these tips for CRL's spoof: "Use the log to make a bridge across the chasm and open the can at the python to scare it away. You'll have to drop all to enter the small tunnel.

INFORMATION EXCHANGE

Ian Harrison, 53 Penrhyn Beach East, Penrhyn Bay, Llandudno, Gwynedd, LL30 3RW will send you complete solutions to **Terrormolinos, Seabase Delta, Robin of Sherwood, Bored, Boggit** and **Hampstead.** All at 45p including p&p.

The Rescuers at either 154 Jendale, Sutton Park, Hull HU7 4BE or 39 Monmouth St , Gipsyville, Hull HU4 6QL offer maps, solutions, hints and pokes to a variety of adventures "all at keen prices" – unspecified. Send an SAE for details if you're interested.

Christian Cerri, Bramshott Chase, Hindhead, Surrey has produced a tips sheet for **Heavy on the Magic,** price £1. This includes door sign solutions and the like. Phil Hancock 144 Charlemont Rd., East Ham, London E6 4HE will provide help on a range of adventures including a number — **Spiderman, Hulk, Ket Trilogy, Hobbit** and **Gremlins.** He only wants an s.a.e. when you send in your questions – as far as I can see he's not offering full solutions.

That's your lot for this moon, mates.

GORDO'S HELPLINE

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1: GIVE 2: OVER 3: IN 4: MAKE 5: SACK 6: REDHERRING 7: CURIOUS 8: FROG 9: DUTY-FREE 10: HOLE 11: BLOWPIPE 12: CAVE 13: DAGGER 14: AQUALUNG 15: USE 16: THE 17: CATCH 18: SACRIFICE 19: FILL 20: TAKE 21: CHUBBY 22: KEY 23: MEET 24: GO 25: HOLD 26: DOG.

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SU 287

STRATEGY SIMULATION

REVIEW

Explorer has at last been released by Electric Dreams.

Programmed by RamJam, it is a technical tour de force but, unfortunately, beneath all the coding, there isn't that much of a game.

The plot is very basic. You're a space pilot whose ship has just crashed on the 'emerald planet'. While skimming the atmosphere, various bits of your spacecraft have been distributed in widely scattered locations. To rebuild your craft and escape, you have to find all the missing parts.

By far and away the best thing about the game is the graphics, which are really quite superb. Effectively, there are two graphic 'modes' – one for when you are in the air, the other for when you are moving on the ground.

From the air, you see a map of a section of the planet, arranged in a square grid.

On the ground, you get a view of the scenery in front of you, similar to the one you get in *Lords of Midnight*, only far more detailed and impressive.

Unfortunately, the very detail is a major problem.

In *Midnight*, the graphics were simple, but every view was different. It was possible once you'd played the game for a while, to recognise places. In *Explorer*, the views are incredibly detailed but it is almost impossible to tell them apart. One jungle scene looks very much like another, I'm afraid to say. It looks like somebody has spent an awful lot of time detailing half a dozen basic scenes, which are then cut up jig-saw fashion and re-mixed and repeated ad infinitum.

How then, can you possibly find your missing bits and pieces? Well, when you're close enough to one of them – within easy walking distance, though I haven't the faintest idea how far that is – you can get a compass direction on it. Then it's just a matter of getting there.

Effectively, though, that's all the game involves – taking a series of bearings and using triangulation to find the various bits and bobs you need.

Fine, so every so often you get attacked by a 'robotic bug' which you have to kill – but frankly the standard of animation of the bug is so poor compared to the static graphics that you wonder why anyone bothered with them. They look like a desparate last minute attempt to inject some action into a by-then almost finished program.

Movement otherwise is pretty simple: there is a compass bearing given in the top right-hand corner of the screen. Left and right joystick movements move you about 12 degrees either way, forward moves you forward, and back turns you 180 degrees so you face the other way.

Pressing *U* takes you up 1,000 feet, and *D* takes you down the same amount. You land on the square at the exact centre of the screen, so you have to be careful you don't land on any trees. When you're in the air, *up* takes you north, *down* takes you south, and *left* and *right* take you west and east.

On the ground, if you hit the space bar you get a menu of options on the top left of the screen. Hit the highlighted letter and whatever you have chosen will happen. *B* drops a beacon, *D* gives you the bearing of any objects within range, *F* lets you fire at things and so on.

I found it really difficult to know what to make of **Explorer**.

The static graphics are absolutely superb – easily some of the best around on the Spectrum. But the gameplay is sadly lacking in originality or really that much interest.

On the other hand, I can see that it would appeal to a certain type of gamer, who likes a logical, step by step challenge. Let's face it, it's basically computerised orienteering, which means all the fun of map reading without any worries about having to wrap up warm and keep your feet dry■

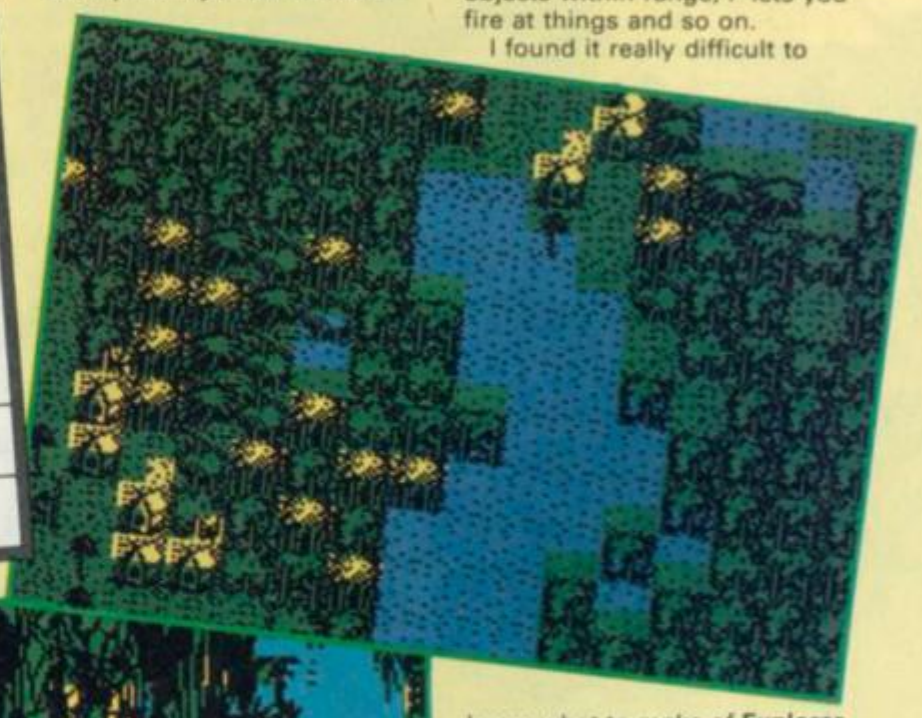
FACTS BOX

Graphically brilliant – but with very little gameplay. Programmers got carried away by the technique and forgot the game

EXPLORER
Label: Electric Dreams
Author: Ram Jam
Price: £7.95
Memory: 48K/128K

Reviewer: Gary Penn

★★★☆☆



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ADVENTURE REVIEW

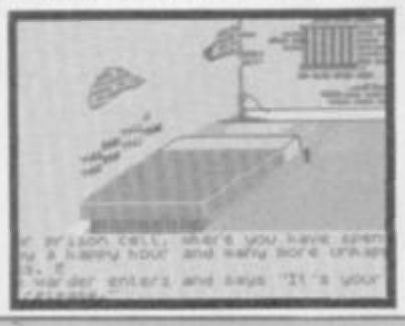
DODGYGEEZERS

Dodgy Geezers is Melbourne House's latest adventure – and it's a bit of a let-down.

You begin in jail, locked up there for your part in the Great Spaghetti Caper. It's all right though because today's the day you get out. Having left Her Majesty's lodgings, you find yourself in a maze of dingy backstreets – you know, the sort of inner city blight that Prince Charles is always wanting people to renew.

Your objective, recounted in a variant of that debased thieves' cant that all TV scriptwriters seem to think is the national language of the East End of London, is to pull off the Big One. To achieve something with your life by committing a crime to remember. Oh, and incidentally, you wouldn't mind getting your revenge on the geezers wot stitched you up over the Spaghetti Caper, know what I mean John, nudge nudge, put a pony in your pocket, get the suitcase from the van...

Problem is, you're not told what that big caper is. You do know, though, that you're going to need the assistance of certain other gentlemen, George the muscle, Mr Video the computer genius, Cracker the safe blower, and others. Obviously, you have to have a way to recruit them somehow.



Plus there's this fella who hides in the shadows a lot – bit stupid really, as his spiffy white Gucci shoes do show up a bit. What's he want?

The game was written – probably should read scripted – by Peter Jones and Trevor Lever, who wrote **Hampstead** and **Terrormolinos** for Melbourne House. Both of those games showed wit, intelligence, a wicked sense of fun – call it what you like.

Dodgy Geezers doesn't. It's one of those irritating adventurers where you have to be in the right place at the right time to meet the right person who'll help you if you know the right things to say and are able to give him or her the right thing.

It also betrays its origins as a **Quill**ed program: it may have been polished up by someone, but it still looks pretty **Quilly** to me.

The parser seems quite limited, although it's difficult to tell sometimes because of the way everything is done in a pseudo Cockney. The responses get a bit repetitive after a while. There is the usual problem of trying to work out just what combination of verb and noun will suffice in a particular situation – you find this a lot with **Quill**ed programs.

If this had been the usual price for a **Quill**ed game, then it would have been pretty decent – but as a full price program from a company like Melbourne House, it's pretty poor. And Lever and Jones can produce better stuff too – **Hamstead** was really excellent...■

FACTS BOX

Knock it on the head John: a really dodgy number. Disappointing effort from the makers of Hamstead

DODGY GEEZERS
Label: Melbourne House
Authors: Peter Jones and Trevor Lever
Price: £7.95
Memory: 48K/128K
Reviewer: Gary Rook

★★☆☆☆

KAYELETH

Kayleth is something of a surprise. It appeared in my hands wearing nothing but a blue cassette insert which read US Gold pre-production sample and turned out to be one of the best new adventures I've seen for ages.

For a start the plot is really effective, taken from an Asimov short story.

As far as I can work out, you are some sort of inter-stellar secret agent, sent by mind transfer to a far planet. Having arrived, you wake to find yourself in the body of an android (not in itself unusual – you are in a factory making them). Judging from what I've seen so far, your objective is to sort out Kayleth, who seems to be the big shot around here and an all-round bad guy.

There is a great option at the beginning of the game – you can get a sneak preview of about a dozen of the scenes and locations in the game. This would seem to indicate that there are a substantial number of places you can go. It also shows the program's graphics off to their best.

FACTS BOX

Excellent – great feel to the plot, good responses from the program and fine graphics. The best new adventure for ages

KAYLETH
Label: US Gold
Author: Adventuresoft
Price: £9.95
Memory: 48K/128K
Reviewer: Gary Rook

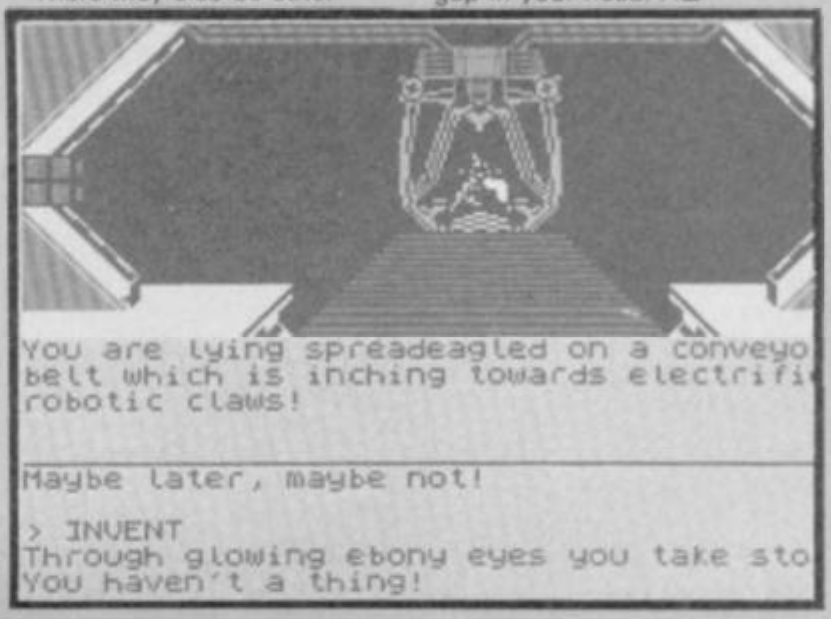
★★★★★

And are they good! The graphics window is about a third of the screen, but the pictures are detailed and well drawn. Many of them have some moving component. All of them are very much complements to the text.

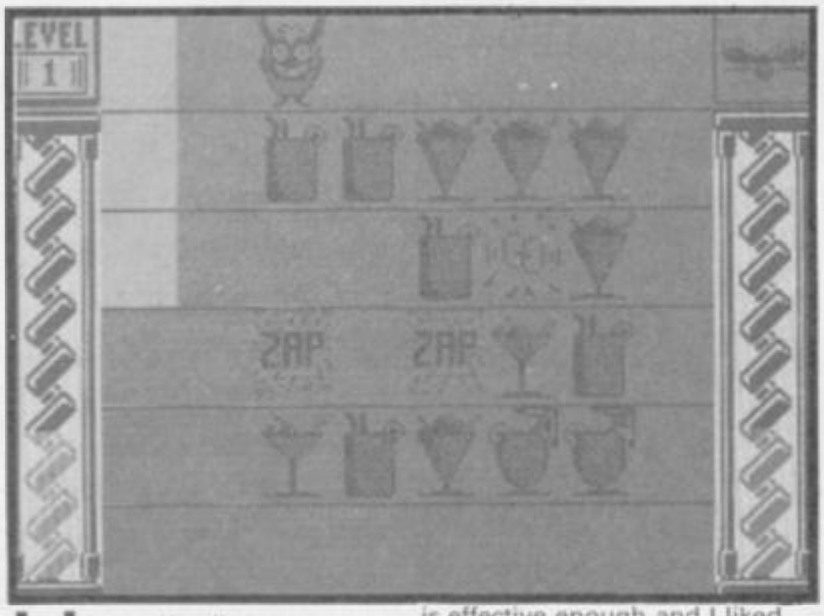
The text itself is impressive, too. The parser seems to be fairly comprehensive, with a good volcab and you can also string together a number of instructions, using the comma.

There may also be other features of the game which I have not yet discovered – I'm working without any sort of instructions whatsoever. But I've seen enough to know that **Kayleth** is going to be a big hit with the adventure playing public.

Just to start you off, a couple of hints. Right at the beginning, try flexing your muscles a bit to get off the belt. To escape the guard android, which will smear you across the landscape rapidamento, go *Up* and pull what you find there. Examine every location – and have a look in the mirror. Maybe you can find something to fill the empty gap in your head. . ■


You are lying spreadeagled on a conveyo
belt which is inching towards electrifi
robotic claws!
Maybe later, maybe not!
> INVENT
Through glowing ebony eyes you take sto
You haven't a thing!

HARVEY HEAD BANGER



Harvey Headbanger begins badly. Not only is the name of the game naff but the instructions are difficult to read and in places misspelt and I couldn't get the Kempston select option to work on the office 128K.

The game is a little different, though slight admittedly. Budget with a vengeance but maybe it has something.

One or two players control what look like Humpty Dumptys. The game is played in rounds and involves a mixture of vicious belly contact and cocktail drinking!

As your Harvey passes over a square it changes to 'your' colour – if you can enclose an area bounded by your colour it will be filled with energy revitalising cocktails, if you can catch the other player in that area you have won the round. It's sort of madly entertaining in a stupid sort of way.

Graphically the actual game is effective enough and I liked the swing on the bars performed by the winning Harvey.

On the other hand the instructions for the joystick and the curious key select all lose the game points.

Moderately entertaining■

FACTS BOX

Marginally inventive game with vaguely original plot. About average budget game reasonably presented

HARVEY HEADBANGER
Label: Firebird
Author: R Hughes
Price: £1.99
Memory: 48K/128K
Joystick: Kempston

Reviewer: Graham Taylor

★★★☆☆

STORM

Stormbringer concludes the extrordinarily successful Magic Knight series of games.

Following in the footsteps of its fore-runners, **Finders Keepers, Spellbound** and **Knight Tyme**, this final part presents Magic Knight (you) with a decidedly ticklish situation.

The Off-White Knight, a mysterious no-gooder from distant lands, is hell-bent on taking over any piece of real-estate that isn't staunchly defended. In the time when our hero was off being thoroughly heroic in other places, OWK beamed himself down to his castle and promptly took control. Your goal, then, is to oust this wretched imposter and reclaim your pad.

Stormbringer is a splendid mish-mash of all the elements that have been employed in various arcade-adventures (horrible term) over the past year or so.

The large figure of White Knight glides along the screens (there are 64) running and jumping in fine **Manic Miner** fashion. Objects and other commands are handled through the abundance of menus. High-lighting options with the joystick and cursor, and selecting them by hitting *Fire*.

The first object that you'll come across (you're carrying it,

FACTS BOX

A must for anyone in need of a quality budget title involving a small man with a large head who can disguise himself

STORMBRINGER
Label: Mastertronic
Author: Dave Jones
Price: £2.99
Memory: 48K/128K
Joystick: various

Reviewer: Ian Douglas

★★★★☆

SAS OPERATION THUNDERFLASH

SAS Operation Thunderflash is a Super Sparkler – a cut above a regular Sparkler and put out for £2.99

It looks a bit like **Strike Force Cobra** but is simpler and its simplicity may be its greatest virtue.

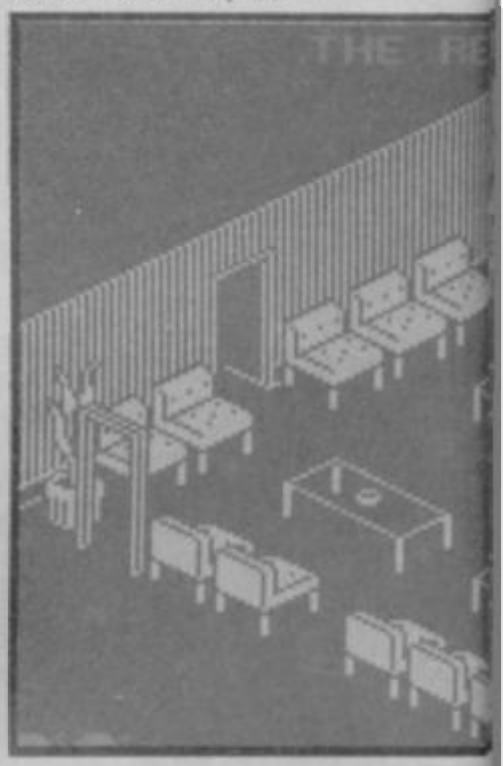
There is nothing much to do in this game other than kill people. It's OK though, the people you get to kill are all totally degenerate terrorists. That is, you can tell they're terrorists because they kidnap people and you can tell they are degenerate because they have long hair and beards. You on the other hand are Rock Hardman, leader of a crack SAS team. You appear to be obese. I don't know why – maybe it's the tension.

The setting is an embassy as presented in **Knight Lore**-style 3D. There are comfy executive type chairs and Habitat-style coffee tables – a tribute to the graphics quality I guess.

The game blurb says: only cunning, skill, determination and force will succeed in

conquering these symbols of subversion. This is pretty heavy right-wing stuff. I mean, maybe these terrorists have a case. Unfortunately there is no 'chat to terrorist' option so I guess you'd better just kill them.

The business of terminating terrorists with extreme prejudice is actually rather clever and requires quite a lot of skill and extremely fast



RMBRINGER

in fact) is Gadget X. This is a utility item, allowing you to *Save* and *Load* games to/from tape.

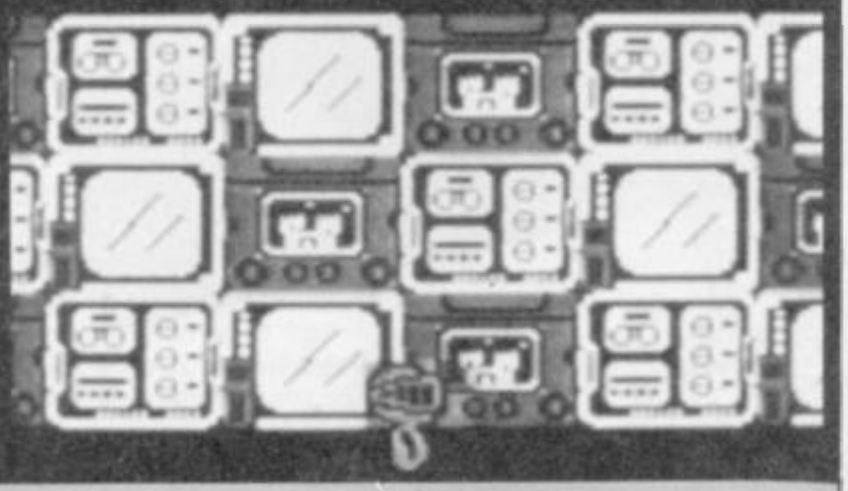
Attribute problems, while still present can be tailored – a bit – by using another option. Magic Knight will either carry around a little block of colour, thus changing the colour of the background or he will pick up colours from the background. It's just a matter of choosing which you prefer.

Before you can get anywhere near ousting OWK from his position, you'll have to work out how to get back into your castle. Lots of things spring to mind. Of course, one solution is correct.

Disguises are easily the most exciting objects around. They will instantly transform you into another character. Very convincing. Very useful.

Objects, which number sixty-four are also very seldom what they appear to be. Many do things, become things or react with things in unexpected manner.

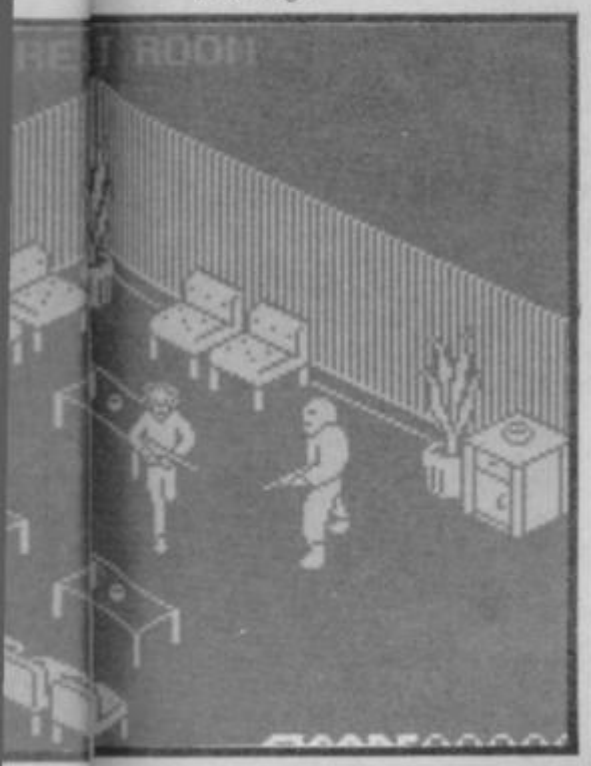
Stormbringer has fast graphics, a large array of rooms and many things to do. Some of the monsters are completely enormous, and though there isn't a disproportionate degree of originality, it's quite good fun. And as you'd expect it's all very slickly done■



reactions.

Each of the rooms in the embassy presents the same problem in a different way: how to get into a position where, even momentarily, s/he can't shoot at you but you can shoot at him/her.

It involves a lot of split-second timing as you work out how the terrorists move and how you can make use of the position of the different items of furniture to give you an advantage.



FACTS BOX

Well presented and challenging 3D game. A simple idea but lots of violent fun. Strongest Sparklers release for ages

SAS: OPERATION THUNDERFLASH
Label: Super Sparkers
Author: Mark Rivers
Price: £2.99
Memory: 48K/128K

Reviewer: Graham Taylor

★★★★☆

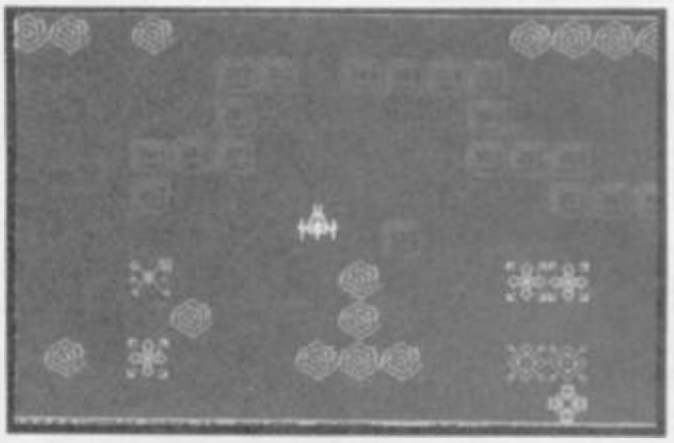
There isn't much else to the game – obviously you have to find your way around the embassy and rescue hostages when you find them but in the end it's all about killing them before they kill you and it isn't easy.

I rate **SAS Operation Thunderflash** pretty highly. The game idea is very simple but it takes a good deal of skill to make it through even half a dozen rooms.

It's all very well presented with convincing 3D graphics and at £2.99 you'll get a lot more fun out of it than a good many full price games■

BUDGET REVIEW

XCEL



The future is going to be a pretty grim place if we believe the storylines of many computer games.

Xcel, from Mastertronic is a *particularly doomladen* example.

In the future, we are told, machines come to rule over people. It's pretty bad already, and we've only been going for a couple of minutes!

Anyway, after watching millions of your fellow human beings downtrodden by the evil and very tyrannical machines, you decide that enough is enough and you... (complete the sentence in no more than seven words)

Yeh. It's THAT storyline again. Deary me.

Right. Well, off you set in your stolen space-craft finger on the *Fire* button, heart in your mouth.

Your mission is to destroy everything mechanical. What ensues, therefore, is a shoot-em-up of moderately large proportions, guiding your craft through strange landscapes, ducking and weaving as if there's no tomorrow.

As soon as this stage is complete, you'll be confronted by swirling aliens who are very scary indeed. These guys swoop around and bomb with amazing ferocity. If you can work out a safe place to stay, you'll be OK.

Should you survive this level, it's back to a different maze of strange green things. This time, there are more dead-ends, and you'll have to take your chances with passages that look the most safe.

Despite the simplicity of the gameplay, and the fact that it's been done a million times before, **Xcel** is actually quite entertaining to play.

I'm not quite sure why, but the smoothness of the ship and the uncluttered screen and the top-bottom scrolling make the game 'feel' nice.

A large number of inventive touches (indicating that space left could have been used to improve gameplay) add to the general good feeling.

Xcel is neat. It scores zero on originality, but major points for *good value for its 'nice' feel in play*■

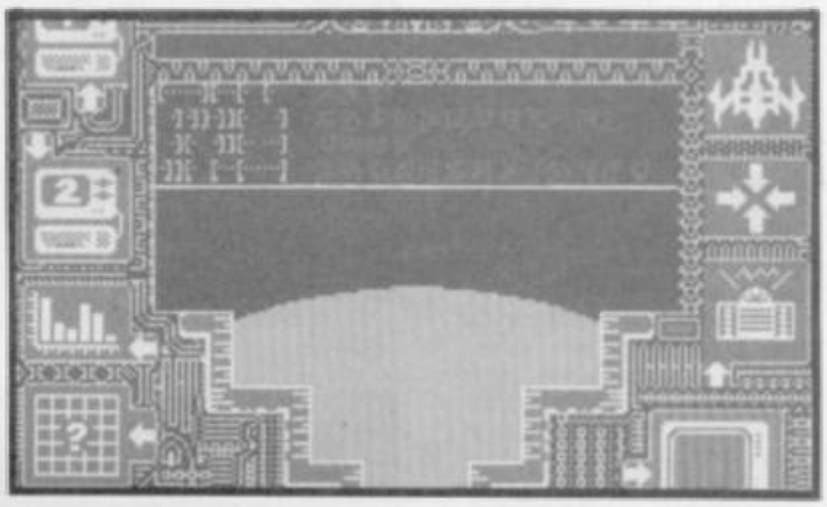
FACTS BOX

It's got most of the things that you'd expect from a budget £2 shoot-em-up, and quite a bit more. Check it out

XCEL
Label: Mastertronic
Price: £1.99
Memory: 48K/128K
Joystick: various

Reviewer: Jim Douglas

★★★★☆



ADVENTURE REVIEW

SILICON DREAMS

It's easy to forget that there may be new adventurers out there, who may actually not have heard of Level 9 yet.

So, for the benefit of the uninitiated, a brief aside. Level 9 is the best British adventure house around. The company, run by the Austin family from a decaying mansion outside Weston-super-Mare, has a reputation second to none (except, perhaps, Infocom – and they're American and don't do a lot for the Spectrum).

A long time ago – two or three years, at least – Level 9 put out an adventure called **Snowball**, which was the first in a series of three games known as the Silicon Dreams trilogy. It was followed by **Return To Eden** and **The Worm in Paradise**. All three are excellent adventures, the sort of programming and plot writing that lesser houses can only dream of.

And now, for your delectation and entertainment (plus bafflement), the boys from BT, Rainbird, have brought out all three titles together in one box at the reasonably paltry sum of £14.95.

I'm not going to waste too much time on the plots of any of the games, but here's a very brief rundown.

In **Snowball**, you are secret agent Kim Kimberley (and yes, Level 9 chose the name deliberately because it can be male or female) and have to save the colonisation starship Snowball from being destroyed by the machinations of the evil traitor. . .

In **Return to Eden**, you have saved the Snowball but unfortunately the colonists on the spaceship have (wrongly) decided that you are the traitor. You have escaped to the new world, Eden, at present occupied only by ferocious native flora and fauna, and the robot pioneers sent on ahead to prepare the world for human occupation.

In **The Worm in Paradise**, you play a citizen of Enoch, Eden's first city. It's a utopia, with full employment and no crime. It's also very boring, and you might like to liven the place up a bit.

The sort of problems you face in all three adventures are often pretty devious. In **Snowball**, for example, you have to work out the series of a range of colours – what order do they go in? A little bit of resistance might help you work out the panel puzzle before the Nightingale comes to take you away.

The parser for all three programs is superb, as usual with Level 9 games, and the program will understand and respond to a wide variety of inputs. There are some small problems: right at the start of **Snowball**, if you try to leave the first location by the trapdoor, you are told that you'll have to stand on something to reach it. Try to stand on something, and you're told – again – that you'll have to stand on something to reach the trapdoor.

The text compression is probably to blame for this and similar strange responses but they're minor problems only. Considering the amount of data Level 9 has managed to pack into a single *Load*, it's nothing to carp about.

Graphics also add considerably to the game (**Snowball** didn't have them when I first played it, oh so long ago) and are quickly drawn and atmospheric.

The whole **Silicon Dreams** game set is an unqualified success for Level 9 and Rainbird. Very definitely worth £14.95 of anybody's money and at only £5 per program it's a real bargain■

SINCLAIR USER CLASSIC

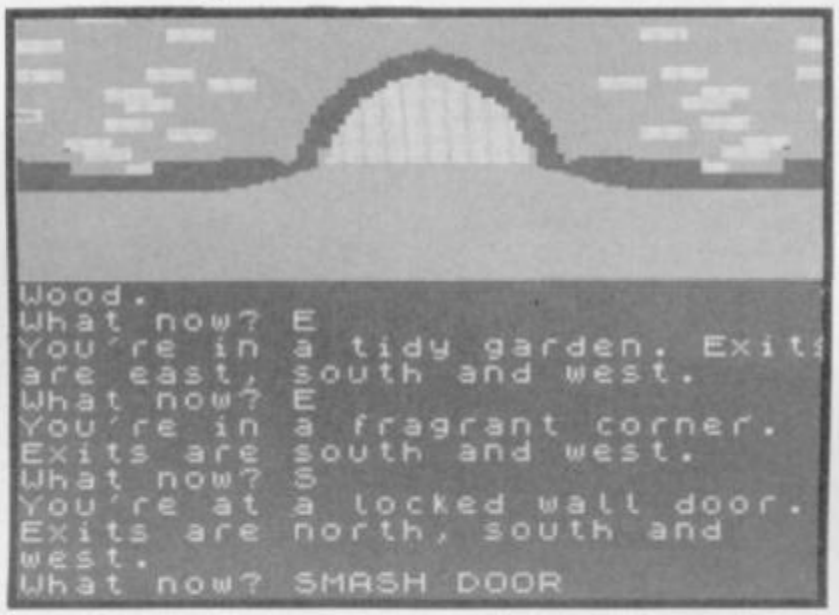
FACTS BOX

A 24-carat classic. Great puzzles, neat graphics with three of Level 9's best together for the first time

SILICON DREAMS
Label: Rainbird
Author: Level 9
Price: £14.95
Memory: 48K/128K

Reviewer: Gary Rook

★★★★★



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THE ARCADE COIN

What's hot in the arcades now will be on your micro pretty soon – you can be sure of that. Just look at last year's chart hits – Paperboy, Gauntlet, Space Harrier, Shaolin's Road. Now Clare Edgeley reveals what'll be what in a few months...

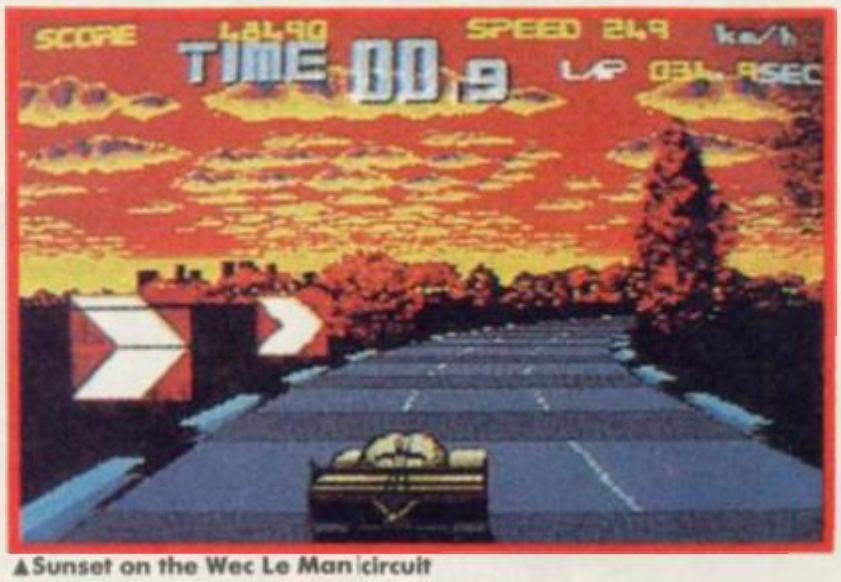
The arcades have gone high tech!

Take a quick look round any arcade these days and you'll spot at least one Super Coin-op which uses a hydraulics system to throw its unsuspecting passenger round the cabinet. There'll also be the odd motorcycle resting on a platform daring budding Hells Angels to take it over the ton.

These Super Coin-ops have incredible cabinets which you either sit in or on. Then when the game starts the machine really spins or tilts – using in-built motors – to give an amazing sensation of realism.

One of the first hydraulic games I saw was Bally/Sente's **Shrike Avenger.** It's a fast space shoot'em up set in an imposing futuristic cabinet. Climb in and prepare for take off. The first time you sit in one of these monsters you get the shock of your life as the cabinet tilts, shudders and rolls from left to right to coincide with the movements of your joystick. My one memory of **Shrike Avenger** was the cabinet. The shoot'em up I forgot almost as soon as I disembarked with slightly shakey knees.

The next big hit was **Space Harrier** which, of course, has also scored as a computer conversion from Elite. The fabulously colourful 3D graphics, the movement of the sit-in cabinet were, and still are, breathtaking. The first thing you'll notice about **Space Harrier** as you climb into the pilot's seat is the seat-belt. It makes you wonder what type of a ride you're in for. Take it from me – it's turbulent. Still using the basic blast-everything-which-moves theme, **Space Harrier** hurls you up, down, left and right while managing to tilt the cabinet in a roll in whatever direction you push your joystick. It's hair raising and great fun.



▲Sunset on the Wec Le Man circuit

Then came **Hang-On,** launched on an unsuspecting world. A totally new dimension to gaming. A motor cycle which you could sit on and tilt from side to side to corner the bends. Amazing. Such a simple idea, I'm surprised someone didn't come up with it earlier.

Hang-On looks like a huge gleaming mean machine that handles as near to a real bike as you're every going to get on a simulation. The screen is set inside the fairing so as not to spoil the bike's lines and it's one hell of a ride. Throttle and brakes are where you'd expect to find them – on the handles; and steering's no problem at all even though you can't move the handles from side to side. Instead, you lean the bike. It takes a bit of doing and you really need to place your feet firmly on the floor to get purchase. When cornering, the angle you need to tilt the bike corresponds to your speed. The faster you take a bend, the greater the angle you have to tilt the bike, and then remember to bring it back to the level for the straight. To dodge hazards and other bikers just tilt the bike slightly slide out in that direction.

Enduro Racer, also from Sega, is another bike simulation, but this time it has less of the racing element and is more of a jump-the-hazards-and-avoid-the-baddies type of game. You'll find yourself sitting on a huge bike again and movement is entirely consistent with the trials riding. Each time you come to an obstacle – rocks, logs, etc – you've got to pull the bike's nose upwards into a wheelie to fly safely over the hazard. Forget to do a wheelie and you'll end up biting the dust on the other side. **Enduro Racer**'s hard to handle. You don't want to take off too soon, and if you leave it too late the bike will just plough into the object. An added difficulty is changing direction in mid-air. Astride the bike, you'll have just hauled the front wheel off the ground and then you're expected to twist the handlebars to change direction. Weaklings should not attempt this one. Oh, and one more thing, you must keep the throttle turned to full power so as not to lose speed when you land.

Sega seems to have corned the market in the bike simulations. With **Hang-On** which you tilt from side to side, and **Enduro racer** which you lift there doesn't seem to be any other features a coin-op can cope with on the bike front.

Both **Hang-On** and **Enduro Racer** rely on you doing the hard work.

Not so with Konami's latest blockbuster **Wec Le Mans,** aleady being heralded as THE

▲Hang-On: City Night

▲Hang-On: Sea-side

-op GIANTS FOR 1987

game of the decade.

Wec Le Mans is far and away the most sophisticated and certainly the most thrilling game I've ever played. It's like **Hang-On** only with a racing car which you actually sit inside.

And its movement system is entirely different from anything experienced before – you really get thrown around.

You've still got to race to each new starting point within a set time limit, there are hazards to avoid, other cars bombing past you and getting in the way, great graphics and high speed.

But add to that the cabinet which actually looks like a racing car outside as well as

Wec Le Man's elaborate sit-in cabinet ▼

inside, a movement system which stimulates each action, even spinning, and which shakes the whole car when you go off the side of the track and skid on the black and white marker border lines, and you've got one hell of a game. One hell of a price too – around £7,000 of gear.

The great difference between **Wec Le Mans** – it's a re-run of the French 24 hour race at Le Mans – and other racing sims lies in the cabinet. Instead of swinging from left to right, it spins in a semi-circle on a circular base. So, as you whiz round a corner to the right, the cabinet also whizes round to the right at great speed. Losing control and going into a spin is even more hair-raising fun – the cabinet spins first clockwise then anti-clockwise until your screen car explodes or strightens out.

The other amazing feature is the juddering effect which shakes the cabinet and the steering wheel – This occurs whenever the car leaves the track and bounces over rough ground. The effect on the steering is felt immediately as it jumps around in your hands and you'll have to struggle to bring the car under control once more. I could play **Wec Le Mans** for ever – if I had the money.

Sega launched its rival Super Coin-op racing simulation at the same time as **Wec Le Mans** – at the end of last year – **Out Run.**

It has you as the driver of a smart little Ferrari. Yup, there's even a blonde in the passenger seat for company. Why is it they always use blondes to portray glamour? Besides I'd rather have had a really hunky bloke.

Where **Out-Run** scores is with its graphics – they're better. I don't mean in the way they are drawn, but rather the angle you view them. Because the Ferrari is so low slung, the view you get seems to be about two feet off the ground. Consequently, you can't see far ahead and, when cresting a hill, you don't know what's on the other side until you've got there. The danger element lies in not knowing and you have to take evasive action when the danger is almost on top of you. It's an unusual view and one that works brilliantly.

But **Out-Run** doesn't throw you around the cabinet as **Le Mans** does and therein lies the difference. It's the hydraulics which gives you that great addrenelin rush – and **Out-Run** can't handle it.

Hopping out of **Le Mans** and into **Out-Run** is certainly a mad thing to do. One minute you're spinning in uncontrollable circles, the next you're sliding from left to right at top speed. It's enough to make you throw-up.

Out-Run's movement pattern causes the Ferrari to slip from side to side as you switch lanes while haring down the huge multi-track highways. Taking bends at top speed also makes the car slide violently to one side.

However, even when it's sliding you still feel in control.

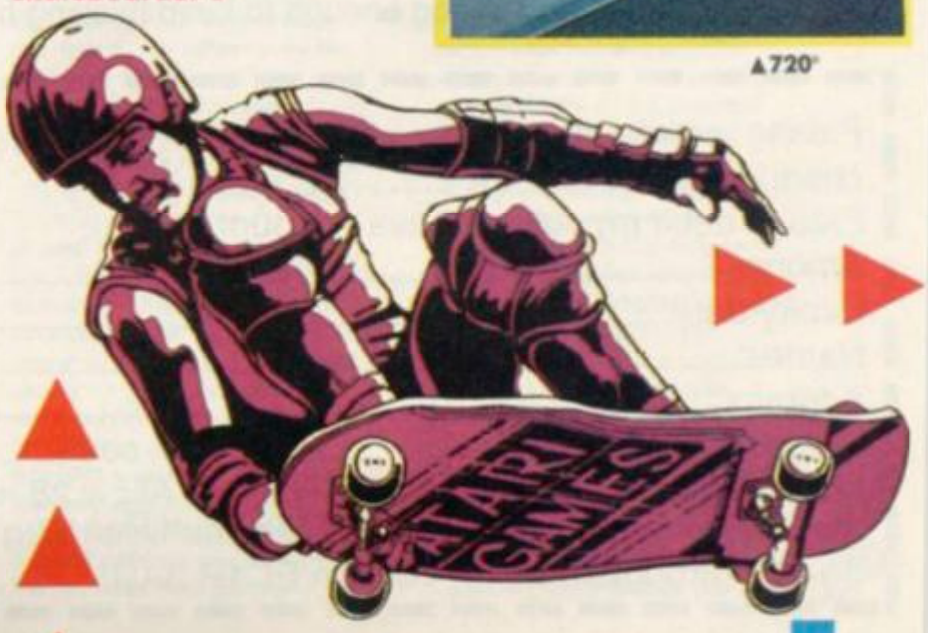
With **Le Mans,** you often wonder in what direction you'll end up facing when you've stopped spinning■

They're here already! Next year's coin-op hits have been flow in. Most still have to be unpacked from their crates but a few arcades in London's West End have been having a sneak preview...

Atari's 720° is a fabulously realistic skateboarding simulation. 720° is one of the hardest acrobatic tricks to perform on a skateboard and it's done by jumping into the air and turning two full circles before landing. The aim of the game is to perform as many manoeuvres as possible to earn bonus points. Those points enable you to 'buy' tickets to the skateboard parks where, if you complete each course in a given time, you'll earn cash prizes which let you buy extra equipment – helmets, new boards, pads and shoes. With the new equipment you'll be able to jump higher, skate faster etc. Skate City is a fantastic place, full of hazards and ramps – a skateboarder's paradise. 720° is very fast and totally original. There are over 20 levels to the game, each of which is different from the last and do they get harder? They do! The controls are unusual with a rigid joystick which moves in only two directions – clockwise and anti-clockwise enabling you to perfom some awesome manoeuvres, many of which look impossible.

Konami's Jackal is based on the Commando/Rambo **style games. Very loosely –** 95

▲720°



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1986 Top Ten Coin-ops

1	Nemesis	Konami
2	Hang-On	Sega
3	Ikari Warriors	SNK
4	Arkanoid	Taito
5	Supersprint	Atari
6	Salamander	Konami
7	Rampage	Bally
8	Enduro Racer	Sega
9	GT Racer	Konami
10	Jail Break	Konami

This list is compiled with the help of one arcade in London's West End, and is not necessarily the case country-wide. Thanks to John Stergedis at Electrocoin

ARCADES

the graphics are brilliant. I suppose it could be termed conventional warfare – just you and your trusty jeep driving into the jungle to single-handedly rescue some unfortunate POWs from their fate. And, yep, it involves lots of bombing of tanks, missile emplacements and possible buildings where the POWs could be held (which seems a little daft, but, there you go). Dodge enemy gunfire and now down enemy soldiers. Then, when you've freed and collected all the POWs, rush north to the nearest helicopter pad and see them safely on the chopper. All the while you'll be bombarded by bullets, missiles etc. As a one-player game, Jackal is difficult. But in two-player mode you and your team mate give each other covering fire to fend off the baddies. It's much more fun with two!

Lock On is so new we haven't even got any pictures to show you. It's from Tatsumi, the people who brought out that madcap racing game Buggy Boy and the gameplay is kind of a flight simulator/shoot 'em to bits but with some amazingly realistic 3D graphics. Fly over a number of landscapes shooting ground targets and flying targets. Missiles can be locked-on to selected targets or you can just blast away with your lasers. It takes a bit of co-ordination to get the hang of things, but it really plays great. The landscapes change with each level ranging from desert scapes to ice fields to even space stations. The baddies hurl a variety of highly intelligent missiles at you, which home in and are very hard to dodge.

▲Danger Zone screen

Fire Trap from Data East is a truly weird game with shades of the *Towering Inferno*. Again this is very new. You're not trapped in the blaze, you're skurrying up the outside of the skyscraper – *Spiderman* style – trying to get to the top and rescue the odd bod *en route*. The controls are difficult – there are two joysticks and you jerk them up and down in one/two time to make your character climb the building. Occasionally, windows blow out when you're climbing past

▲SF cabinet for Danger Zone

and cars (?!), ducks, teapots and other odd objects hurtle downwards to knock you off your perch. I did say it was *wierd*. Dodge these, put out the flames by shooting at the burning windows, and climb over the trapped characters to free them. They then descend by parachute. All very strange but great fun. The joystick controls are very tiring so I'll move on to the next game.

Tecmo's Grid Iron Fight – is an American football game based on its popular predecessor – World Cup. The cabinet style is the same too – a waist-high table-top design with the players viewing the screen from above. If the Channel 4 American football craze continues then this should do really well. It's far better than its rival 10-Yard Flight but the roller-ball controls makes it an exhausting game to play.

Danger Zone from Cinematronics is another hot new release. The cabinet is very hi-tech and looks as if it's just dropped in Zanussi-style from another planet. It's a conventional shoot 'em up with swarms of enemy choppers, fighters and bombers invading your desert outpost. Your only defence seems to be your rapid fire anti-aircraft gun with bullets which 'rake the skies with hot lead at 60 rounds per second'. I must say the graphics look horribly realistic, though I haven't had a bash at this one yet to see how the controls react■

Coin-ops look pretty weird these days with all the new gimmicks and controls – multi-player games with four steering wheels, pairs of skis you stand in.

*Gimmicks are what keeps the coin-op industry buzzing. Anything goes – it doesn't matter how weird – just so long as it makes a game look and play better. The kind of thing I mean is those famous real bike handlebars on the **Paperboy** coin-op.*

And the new games coming through now are, believe me, taking things to extremes.

*Nintendo's **VS Slalom** has what is probably the most outrageous add-on – a pair of skis attached to the bottom of the cabinet with a pair of ski poles which act as joysticks. It sounds naff but it's great fun. You're a skier on a slalom run. Stand on the pair of stunted skis, shifting your weight from one foot to the other to make your skier turn through the market flags. To onlookers watching you play you look a bit daft but the realism of the play is greatly improved. Two ski poles run up from the ground level to terminate in joystick handles which you push forward for more speed or pull back on to slow down. It's a brand new idea and the game should be a success even if it isn't very hard to complete. Without the skis, though, **VS Slalom** would be little more than average.*

Extras like rifles fitted to the front of cabinets are now old hat but three new games –

▲Crossbow

***Crossbow, Hogan's Alley** and **Bank Panic** give the idea a neat twist.*

***Crossbow** – you guessed it – has a crossbow on the cabinet. It's the old fight-through-several-treacherous-terrains-to-rescue-a-princess routine. The idea is to use the attached bow to kill assorted monsters which swoop and leap upon you. **Hogan's Alley** and **Bank Panic** are very similar only with guns – both depend on fast reflexes to shoot the baddies before they shoot you. In **Hogan's Alley,** three cardboard cutouts swing to face you. One or two will have guns, the others will be innocent. You spot and shoot the gunmen to gain the highest points. **Bank Panic** runs on the same theme in which doors open and either gunmen or innocents appear.*

Multi-player games are

96

probably one of the most formidable powers on the market at the moment. The great success story is obviously Atari's ***Gauntlet.*** *The key to its success was each player can leave or join the game at any time without disturbing his/her team mates' games. Atari has recently released* ***Gauntlet II*** *which has over 100 new maze layouts, new potions to collect which help your character out of sticky situations and a feature where you can choose to play any of the four characters, even if someone else is playing that character. So, for instance, there could be four Valkyries playing at once, if the Valkyrie is your favourite warrior.*

After ***Gauntlet,*** *Sega capitalised on Atari's idea and released* ***Quartet,*** *based on a different scenario but with option of four characters playing at once. Again it's a battle scene but is more of a straight shoot 'em up with cartoon-style characters, than* ***Gauntlet.***

▼Gauntlet II

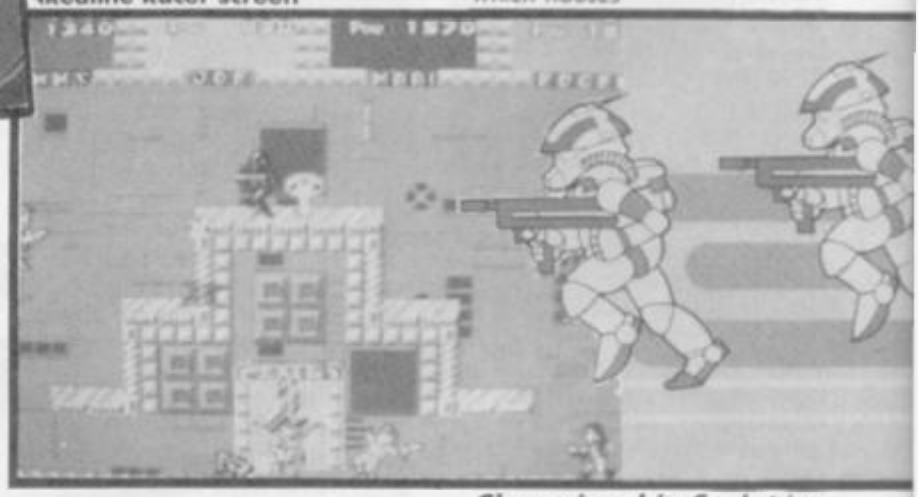
Championship Sprint►

Even racing games have caught the multi-player bug. ***Championship Sprint*** *is Atari's sequel to* ***Supersprint,*** *a racing game which you view from above with tracks that make Spaghetti Junction look a doddle. Your car will often disappear from view as it dives under a bridge and you're left to guess the direction you should be turning the wheel.* ***Supersprint,*** *was very successful and* ***Championship Sprint,*** *built on the same lines but with new convoluted courses and bonus extras should do likewise. The new cabinet which houses* ***Championship Sprint*** *has two steering wheels on it and with someone to race against it's terrific.*

Redline Racer *is its racing rival from Cinematronics. It's obviously a* ***Supersprint*** *lookalike, with the same style convoluted tracks and general layout. I haven't played it yet, but the graphics look clearer and better defined. Whether it's as good as the original, only time will tell.* ***Redline Racer*** *comes as a two-player game in an upright cabinet or for four players in a squat box cabinet where all four players can view the track layout from above■*

▲The four steering wheels on the 4-player Redline Racer cabinet

◄Redline Racer screen



▲Quartet
▼Rampage

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My favourite multi-player at the moment is Bally/Midway's ***Rampage*** *which is a game of mindless violence featuring three unreal creatures. King Kong, Godzilla and Wolfman are all portrayed climbing up skyscrapers and then punching them to bits with a few well timed blows. If it's fist power you're after, this is the game for you. You've got to destroy all the great cities in America by pummelling the skyscrapers to smithereens. It's wonderful! Once again, the multi-player feature means you can choose the character you want to play and join or leave the game at any time – usually when your money's run out.*

128K ART STUDIO

WORK-OUT

REVIEW

Just as **Art Studio** had to compete with **The Artist** from Softechnics so, inevitably, **Advanced Art Studio** will be compared with **Artist II**.

Unlike **Artist II**, (given a Classic in November's SU), Rainbird's advanced graphics extensions are built around the core of the old program. It includes standard design features, such as varying widths of brush and pen, different airbrush density, a wide variety of shape designs, together with a large number of block colour or pattern fills. You can also type text over your graphics, in any direction, and create character sets – there are five included in the package.

Most of the advanced features involve the 128's extra 59K of memory which is split into a 43K Ramdisc and a 16K graphics scrapbook.

FACTS BOX

The enhanced 128K version of Art Studio continues the competition with the rival 128K upgraded Artist. A classic

ADVANCED ART STUDIO
Label: Rainbird
Author: James Hutchby
Price: £24.95
Memory: 128K only
Joystick: Various

Reviewer: John Gilbert

★★★★★

The Ramdisc is accessed through the Files menu. Select the Microdrive control menu and click the *R* option. You can then get a list of Ram-stored files, or *Save*, *Load* and *Erase* files. Graphics screens can be merged together by loading in one and overlaying another using the *Merge* option. The program can store at least two of these screens and more using the screen shrinking option, which takes all the unnecessary bytes out of a screen file.

Pictures can also be compiled from the **Studio's** internal scrapbook which comprises a library of images snatched from any drawings you have made. For instance, the program contains a scrapbook file called *Logical Pad* which has a series of circuit diagram components. You can search for the component your diagram needs and switch to the main screen which holds your work. That screen now contains an outline window, the size of the component. You can move it into position, press *Fire* and the image is dropped into your schematic.

You can create a scrapbook file just as easily. Draw your image on the main screen, position a window around it and switch to the scrapbook mode. When you click the *Insert* option the image within the window appears in the scrapbook and can be stored on Microdrive or tape.

Advanced Art Studio is compatible with most dot-matrix printers – you'd be safe with Epson compatible but with a little help from the manual you should be able to convert the software to run most printers under the sun.

Unfortunately, the initial printer/mass storage set-up takes place during loading so you have to sit by the Spectrum for ten minutes, stopping and starting the tape when told and entering printer options and codes when necessary. At the end of the *Load* when you've tailored **AAS** to your hardware set-up you can save the new version of the program.

Although **Advanced Art Studio** is an extension of it's 'little' brother it is a real step forward which makes the best use of the 128K+2 machine.

It provides a professional environment which, no doubt, graphics artists and designers could just about use■

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KWAH!

ADVENTURE REVIEW

Do you remember **Redhawk?** That strange comic strip-type adventure about a chap by the name of Kevin who found himself in hospital, without his memory, except for the word 'Kwah'.

Saying this strange word suddenly transformed him into a super hero called Redhawk (who, rumour had it, was currently running neck and neck with Spiderman in the Super Hero of the Year competition, but enough of idle gossip and back to the review).

Redhawk had middling reviews despite its questionable gameplay. But mainly due to its innovative style comic strip graphics which was a bold venture by the programmers. But it sold well across the board, hence Melbourne House accepting this sequel – **Kwah!**

The original game lacked a few things to make it special, the plot was a bit thin, the graphics while OKish really needed jazzing up a bit to try and imitate a real comic strip. The vocabulary was very small and very fussy and the game was actually quite slow to play.

In **Kwah** there have been improvements. The plot has been carefully thought out, the parser is greatly improved.

What about the plot? Well, Kev is still trying to piece together his past and after some research decides that he must have stayed at a place called the Lee Rest and Rehabilitation Centre at some time.

So, the opening scenes are Redhawk landing at the gates of the Lee Centre and finding strangely that he can't take off again. Then all sorts of things happen to our brave hero. Gassed – tied up – gagged – locked in a padded cell – oh dear, Kev's in trouble. He can't even say Kwah, cos he's gagged. Or can he?

Kwah! is good fun, and much better than **Redhawk**. There are in fact three objectives in the adventure – one is to escape the complex and return to civilisation with a scoop for the paper – the other two you'll have to work out for yourself■

FACTS BOX

Sequel to Redhawk, and a lot better. The comic-style presentation is retained, but with greatly enhanced gameplay.

KWAH!
Label: Melbourne House
Price: £7.95
Memory: 48K/128K
Reviewer:

Reviewer: Gary Rook

★★★☆☆

DOOMSDAY PAPERS

This is the second title I've seen from Matland, and, like the first it's pretty impressive for an independent label.

The action takes place on the distant planet of Alfa-Ren, mankind's last refuge after the Third Word War has turned old mother earth into a radioactive cinder.

Unfortunately, the omnipresent mad professor, here called Deemus, has determined that if he can't rule the planet nobody will. So he's already destroyed half your world with a super bomb. You have only one hope – a time machine built by your boss, Professor Ferric. The snag is he's already used it so you have to travel into the past yourself, stop the evil scientist's plans from taking shape, and incidentally rescue your boss.

It's a text and graphics adventure, which looks very much like it was written using the **Quill** and the **Illustrator**.

Graphics are good – quite a lot of care has been taken with them, and there are some pretty good details included in the screens. The text descriptions are adequate: short, but giving you all the information you need to know. There are some grammatical problems, and some clumsy phrasings, but you find those in just about any independent adventure these days.

One nice touch is to allow you to choose between two different character sets: unfortunately, both character sets are equally difficult to read.

There are quite a few locations, including a spaceship, a city in the desert, and some sort of secret complex: and the usual type of adventure objects turn up. Play is quick, and the program appears to understand a wide variety of different words and phrases.

So it's a very commendable effort. I think **Doomsday Papers** should keep a seasoned adventurer busy for quite some time■

IN THE LABORATORY OF PROFESSOR FERRIC'S LAB.
ON ONE SIDE OF THE ROOM IS THE CONTROL
PANEL OF THE MACHINE IN AN OPEN
DOOR OF THE MACHINE IS AN OPEN
WHAT DO YOU WANT ME TO DO NOW?
EXAMINE THE PANEL
YOU SEE THE PANEL WHAT NOW?

FACTS BOX

Good graphics, interesting plot-line. Should keep you amused for a while. Definitely one of the strong 'indi' adventures

DOOMSDAY PAPERS
Label: Matland,
29 Moorland Road, Michelover, Derby
Author: M Holmes
Price: £2.95
Memory: 48K/128K

Reviewer: Gary Rook

★★★★☆

WINTER WONDERLAND

Winter Wonderland is the first adventure I've seen that's been produced using Incentive's **Graphic Adventure Creator** –rival to Gilsoft's **Quill**.

The advantage **GAC** has over the **Quill** is that you get everything in one package that you need to write graphic adventures, rather than having to buy two or three packages (Quill, Illustrator, Patch).

As with most adventures written using a commercially available adventure generating package, **Winter Wonderland** is a bit simple compared to professional stuff from the likes of Level 9. But still it's quite a nice little adventure.

You're an anthropologist out to make your name. A Russian colleague has sent you information about a lost civilisation in Tibet. You fly out in you Cessna – and crash on the icy wastes of a snowfield. Your objective: find the lost civilisation before you snuff it – and there are plenty of ways to die in this game.

What I've seen of the graphics so far are decent enough – a bit angular, but recognisably what they're meant to be. The program language seems a bit limited – you find a pair of snow-shoes, but it doesn't understand it when you try to wear them. Responses are a bit limited, too – rather too much of the 'that way is blocked' syndrome. Plus just the slightest hint of the sudden death syndrome – you get no creaking and cracking of the ice to warn you it's about to give, just whoooosh! and there you are in Bejams.

Apart from that, though, it seems cheery enough■

are by the wreckage of your
crashed Cessna light aircraft.Yo
can see a fur coat,a pair of
snowshoes.The aircraft radio
crackles, "welcome to Winter
Wonderland." and then cuts out.

FACTS BOX

Should be quite fun. As you'd expect from GAC the graphics are good, but as an adventure it's a bit basic for the full price

WINTER WONDERLAND
Label: Incentive
Price: £7.95
Memory: 48K/128K

Reviewer: Gary Rook

★★★★☆

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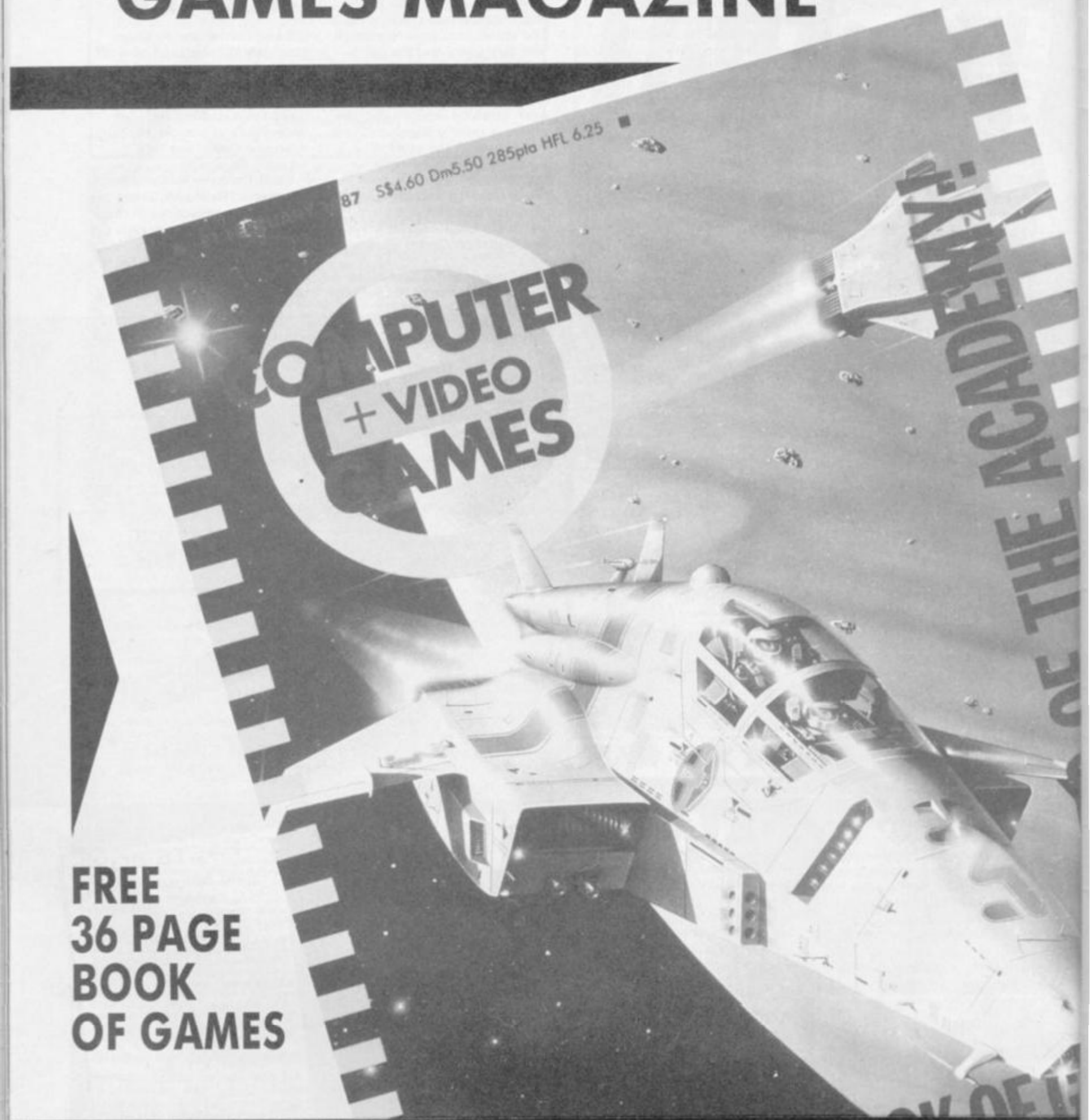

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SURGERY

Sinclair Surgery

Spectrum on the blink? Rupert Goodwins has a cure

The way we like em . . .

Could you answer a few questions about printers?
1) Can the Epson P40 take A4 size paper, and how about other printers?
2) Does the Alphacom 32 use 'proper' white paper?
3) Is the Tandy 4 colour printer compatible with Interface 1?
4) And is there any way of getting rid of the Spectrum colour clash?

Simon Wood
Goldsborough
North Yorks

● *Brief. Just the way I like'em. and the winners are. . .*
1) Yes. Nearly all printers can take A4 paper, either in single sheets or in continuous stationary, which is one long perforated sheet with holes both sides
2) The Alphacom uses special thermal paper, and anything else will just not work
3) Yes, the Tandy 4 colour printer can work with any serial interface, including the Interface 1.
4) And no there isn't. However, a bit of cunning programming can disguise the problem. Have a look at ***Lightforce*** *for a few clues. . .*

Joystick confusion

I have just bought a Spectrum 128K+2, but there are a few things I don't quite understand, mostly concerning the joysticks.

On Digital Integration's **TT Racer,** the options displayed on screen are keys, Interface 2, cursor and Kempston. The SJS1 joystick my 128K+2 was supplied with doesn't seem to work with any of those options. Does this mean that unless the Sinclair joystick is given as an option the game won't work with it?

Will a Kempston joystick fit the Spectrum? How about the Cheetah 125+? What does control by cursor and Interface 2 mean?

J.D. Williams
Three Bridges
West Sussex

● *There's been a little confusion over the 128K+2's joysticks. It's not surprising, really, as they're almost (but not quite) completely nonstandard. To the computer, and any games running on it, the joysticks will look like the Interface 2 (or Sinclair) type. So always select the Interface 2 option when using the 128K+2's built in sticks. If it doesn't seem to work, then try the joystick in the other socket, as games differ as to which one they use. The sockets themselves have been creatively wired, and most other joysticks won't work with them. An exception is the Cheetah one you mentioned, it can be plugged straight in.*

Kempston joysticks are the nearest to a Spectrum 'standard' that exist. You'll need an additional interface for this which plugs into the Expansion port. Make sure that you get a Spectrum 128, or 128K+2, version. Some older ones don't work correctly. You can plug almost any joystick into a Kempston interface (except, of course, the SJS1. . .). Cursor joysticks are a relic from the past, and are not to be worried about.

Even Midi has feelings

I want to buy a 128K+2 soon, but I want to know whether the following will work with it: Multiface 1, Music Machine, AMX mouse, Sound Sampler. How can I connect a Rom cartridge?

What's the best sound sampler, drum kit and synth on the market that'll work with the 128K+2?

Eamonn Hannon
London

● *The +2 will quite happily work with all the devices you mention above, although only one at a time! The software that comes with the AMX mouse will only run in 48K mode however, but AMX is rumoured to have some 128K stuff on the stocks even as I write. The same is true of the Music Machine, which coincidently happens to be the best combined sampler, drum kit and synth that's specific to the Spectrum.*

If you're really into digital noises, you can of course hook up almost any modern synth, delay line or drum kit via the ***Midi*** *port at the back of the +2. The cheapest* ***Midi*** *synth is (I think) the venerable Casio CZ101, which I can recommend as ideally suited to the Spectrum*

And then there was printing

I have just bought a package of a Spectrum 128, and 8056 printer, joystick and various games. However, the printer will only work in 128K mode. My retailer confirmed this, but couldn't shed any light on why it should be.

I'd like to be able to print in 48K mode, and can you tell me a) Why I can't now and b) if it's possible to do this at all. The main reason I'd like to is that I'd like a print out of programs in 48K.

Sue Snape
Crookes
Sheffield

● *The short, unhelpful answer is no, you can't. The user friendly answer is because in 48K mode the computer thinks it's an old 48K Spectrum, and old 48K Spectrums just didn't have an RS232 port. It shouldn't be a problem though, if a Basic program will load in 48K mode, it'll load in 128K mode. Even if it won't then run, you can use the Print option from the 128K menu to list it to the printer. Programs that aren't Basic, like most games programs, won't list anyway, no matter*

Routine discovery

I've got an Opus Discovery 1, and I'd like to use it to do screen dumps with the printer port. I've also got a homemade interface and software that does screen dumps, so all I need to know on the Opus is the routine in the Rom that sends a byte to the printer.

Is there such a routine, or any way around the problem?

E L Oakley
Birmingham

● *Yes, there is just such a routine. However, since at the moment the Discovery is in limbo as Opus are selling the rights to it, I've had a bit of a problem finding out the details. But you can cheat!*
To send a byte to the printer, Open the default channel to the printer port, and then send the byte to be printed out by using RST 10h in the usual manner. when you've finished, put the screen back as the defult channel, and Robert's your mother's brother.

Netting on disc

I have a Spectrum +, Discovery 1, ZX Lprint III and a Brother HR-5 printer.

I would like to know if there is any way I can fix up my layout so I can use it with a ZX Net.

David Forster
Binstead
Ryde

● *The only device I know of that can use the ZX Net other than the IF1 is the Disciple interface. This wondrous beast also has a disc interface, a printer port and software built in, so should be able to replace most of your existing kit. I don't think it will run with the Discovery, although you should be able to cannabilise the disc drive unit itself to use with the Disciple*

Useless cat!!

My friend's Microdrive works very well on his Spectrum. When I try to use it on my Spectrum +, and type in *Cat* 1, all I get is a flashing cursor, and the command won't go in.

Barry McKee
Belfast
N Ireland

● *The problem lies in your Spectrum. There is a signal generated by the Z80 CPU which isn't ever used by the Spectrum, but which the Interface 1 needs to work properly. Now, this signal is right next to the – 12V line on the edge connector at the back, and it is very easy to short the two together with a misplaced joystick port. Result – the Spectrum goes on working happily, but the special signal gets destroyed and the IF1 will never work. Solution: get the Z80 replaced by a repair shop. They're not expensive*

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NEXT MONTH

Attack of the mutant Zombies part II

Wandering in a nightmarish land halfway between fantasy and reality, teams of mutants scavenge for mouldy scraps of food.

A biting blizzard tears into their faces blinding their uncomprehending eyes.

At once, they sit and squat – uncertain shapes formed by tattered rags that once were human clothes. Each cups in shaking hands a bowl of dark gruel. All eyes fix on a central shape, more distorted and mutant than the rest. It forces gutteral half remembered words from its slobbering mouth: "War ger wer pu in thar issshhu boisssss?"

(Translation) "What are we going to put in the issue boys?"

"War azz uzzjarl we gon hab mar sarwar revs tha an ar spartrum marg" coughed one dishevelled figure.

(Translation) "Well as usual we'll have more software reviews than any other spectrum magazine."

"An maaaps, tell thar abart mars an possstar" croaked yet another.

(Translation) "And maps. Tell them we've got a free MapChat booklet and a poster."

"An awl thar uzjarl fatures" added another mutant enthusiastically.

(Translation) "And all the usual features."

The mutants giggle madly and leap and and down in the debris. "Id bib bluding grat", they agree.

(Translation) "Its certainly shaping up to be a terrifically good issue."

Sinclair User: The radiation clears: February 18

PREVIEW

HEWSON'S ULTIMATE GAUNTLET

Being a frog isn't much fun. Especially if you're a rather badly drawn one. Anyway, this is the character you're stuck with while playing Hewson's new thing, Ranarama.

Apparently, you begin as Mervyn the incompetent apprentice, a wizard of amazing ability. While attempting to use one of his high-level spells to improve your decidedly plain looks, you lose concentration and – shazam! – turn yourself into a frog. Tough break it seems.

Ranarama turns out to be the latest project from Steve Turner – the man who brought you the excellent Firelord.

The graphic style makes this game look strongly related to Druid and its clones. There are numerous levels, each containing up to 100 rooms.

Instead of hanging around for a princess to stroll up and kiss you, the decision is made to take things into your own hands, or feet (more flippers really) and go off in search of a cure.

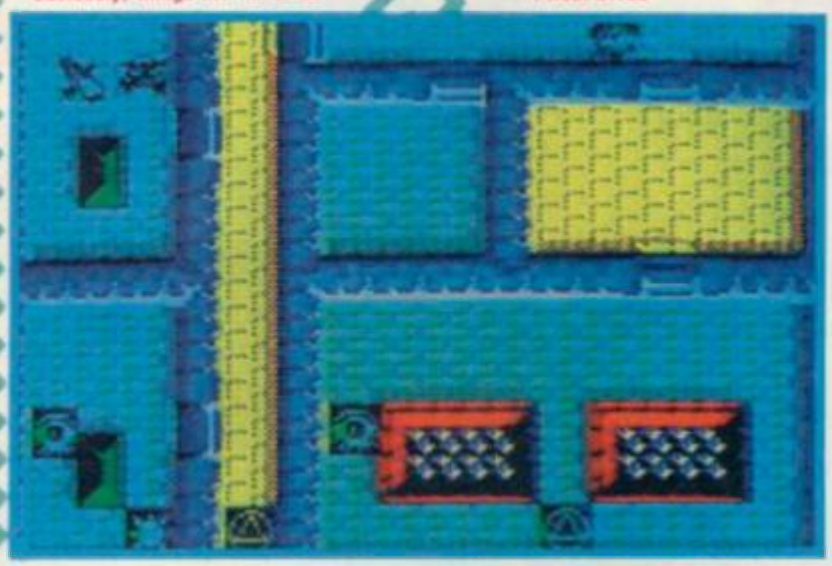
Obviously, things are never as simple as they first appear. No sooner do you begin to move around than wham! – millions of evil warlocks spring up out of the ground and look quite menacing.

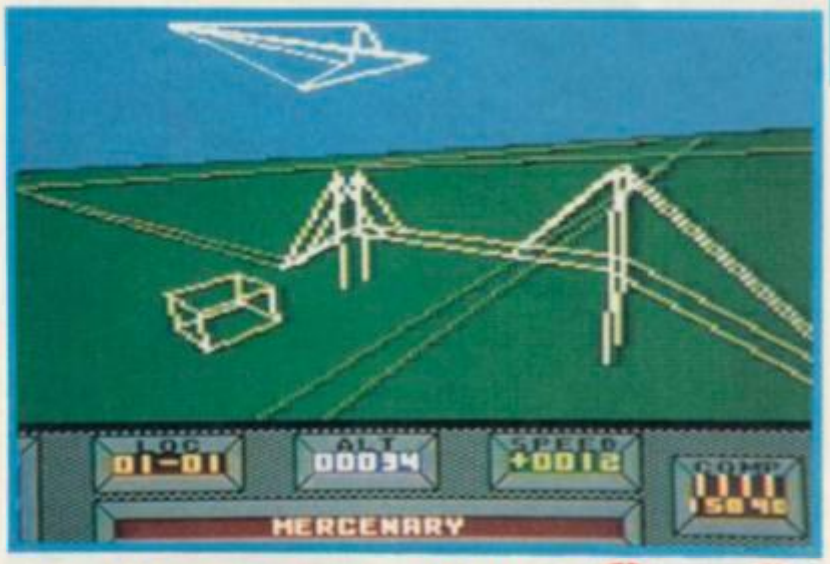
Ranarama is beginning to sound even more like Gauntlet, isn't it? As you'd expect from Hewson, though, it uses some ideas from elsewhere but takes them a whole lot further.

The gameplay is fast and, what with the continual multiplication of warlocks, you'll need just about every weapon you can lay your hands on if you hope to survive. In all, there are eight levels of warlock. Therefore, you will need to ensure you have the correct weapon. A first level missile won't kill a third level warlock, and a second level shield wouldn't protect you from him.

Hewson is currently trying to decide what sort of events will ensue if you manage to reach a wizard. A sub-game of some sort is intended.

Streetdate: March.
Price: £7.95



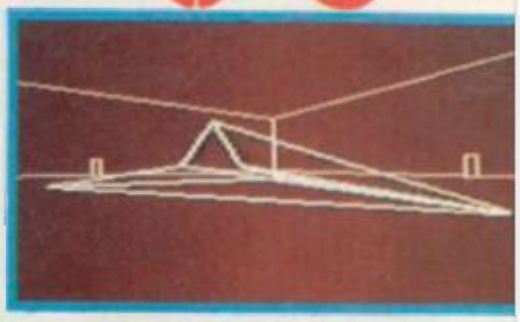


KILLER FOR HIRE

Arival for Starglider? Mercenary, from Novagen has been around for ages and ages on the Commodore has now been converted to the Spectrum.

It's the 21st Century. You are a soldier of fortune. A hired killer. A mercenary. After a ship malfunction over the small and apparently peaceful world of Targ (where?), you find yourself stranded. After a forced-landing you find the planet is far from tranquil. . .

The game achieved almost legendary status on other machines, offering super-smooth real-time 3D graphics combined with an intricate storyline.



Do you opt to sell your combat services to one of the two warring groups on the planet. Or to both? Pcifists may find they do better to simply explore and try and keep out of trouble.

If you adopt an aggressive role, a good deal of air-air combat will ensue – involving flying at low level, looping, banking, diving and flying in between buildings and other constructions. It's pretty impressive, in fact.

Streetdate: February.
Price: £9.95

FLOWERS & GRAVITY

Dig those crazy plants, folks! Firebird has gone all floral with its new game, Kinetic.

Assuming the role of, well, I'm not quite sure exactly, but it's a little like a ball with a thick belt and one eye. Decide for yourselves. Anyway, being a sort of peace-lurving creature, you take it upon yourself – for whatever reason – to set off across a futuristic world in search of a buddah character, and thus find inner peace or something.

On your travels, a number of 'orrible fings will crowd around and assault your person. And its only if you've managed to get hold of various necessary items, that you can blast the alien meanies with gay abandon (or with a laser).

Kinetic features a very bizarre 'gravity' routine, allowing each room to have it's own gravitational field. Some objects, too, will drag you toward them if you're not careful. Watch out for the *pinball bouncers*. They'll hurt you athisaway and athataway if you touch them. Jelly Babies also promise to be big trouble. They'll home in and drain away your energy.

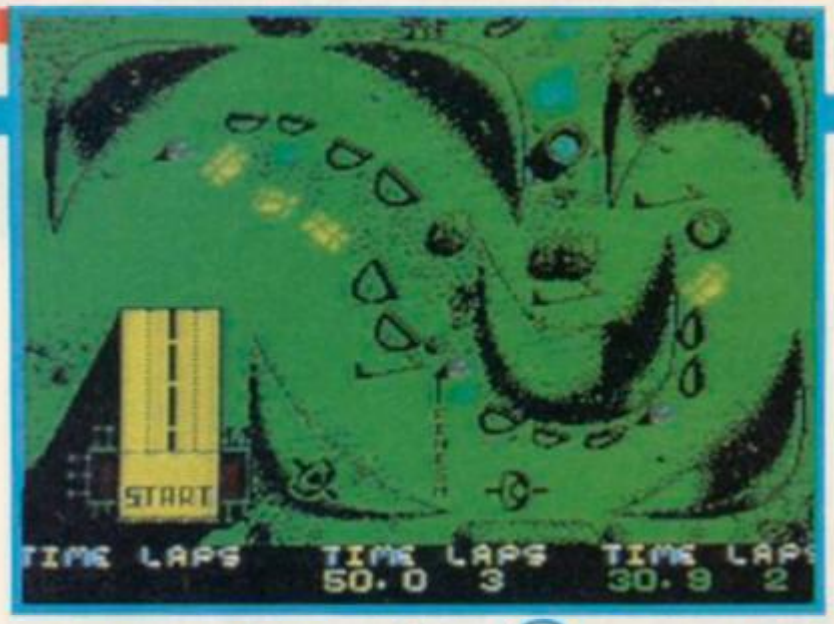
Apparently, a good rule to follow is that red things are very bad for you indeed, and they'll drain your energy. Water, being blue and ultra-peaceful will restore any energy drained by overly energetic jaunts.

The three boxes in the top part of the pic show your three pockets, and what you're carrying in each. Next to that on the right is the infamous codey-bit. Using this – and the mystery piece of equipment that nobody knows about – you can skip about from location to location.

Kinetic's price and release date are still unconfirmed, but we're sure it will be this year.

Streetdate: to be announced
Price: to be announced (Firebird has really got its act together for 1987)

COMPILED BY JIM DOUGLAS



BMX BURMS

Burm. There's a weird word if every I typed one. Not to be confused with the French for an explosive device, Burm – along with the equally silly Whoop – is a term used station to station, across the nation (or so I'm told) by BMX "crews".

If your mega-fast McSpeedy Special is 'in the shop, guy' after you tried to handle that table-top after the loop before going into the dips, you'll be able to keep your hand in with BMX Simulator the follow up to the v successful BMX Racers.

Both programmes are by the Darling bunch. They wrote the first for Mastertronic, but this latest is on their own new Codemasters lable.

This time, instead of viewing the track from the side, you take a bird's eye view of the track (which actually looks rather good). There are seven tracks and the computer will quite happily race against you if no-one else is around.

A novelty feature is the *Action Replay* facility. This springs into action at the slightest whiff of a photo-finish. The computer will replay the finish in order for you to decide the winner. I'd have thought that take away half the fun, but there you go...

BMX Simulator features all the 'radical tactics' you would expect except, apparently slinging down a load of tin-tacks in front of your opponent.

Streetdate: January.
Price: £1.99

FUMING FEUD

If you go down in the woods today, you'll very probably be made invisible, frozen and immobilized, dopplegangered and hit by lightning, – not to mention attacked by lots of tiny men!

Feud on Mastertronic's brand-new Bulldog label incorporates just about all the elements of a great fantasy game. The plot is simple: two wizards have argued for years over who is the superior spell-caster. Eventually, they decide to settle the matter in mortal combat. It's a test of knowledge of spell ingredients, dexterity, strength and speed.

The game is reminiscent of Sabre-Wulf (that very old but revolutionary game from Ultimate which, interestingly enough, has just relaunched on a US Gold compilation tape).

Feud has a rather peculiar screen presentation. A plan view of the map with everything is shown edge-on. A maze of trees, huts and tombstones.

After choosing which wizard you want to be, Learic or Leanoric, the computer begins the game and will control the other character. As you walk around, you'll come across various ingredients that will make the spells with which you can attack your opponent. As soon as you've got an armful of items (you can carry 15), it's a speedy dash back to your corner of the map, sling a couple of plants into the cauldron and mix them up into a thoroughly unpleasant concoction.

On your travels, you'll have to avoid Kieke, an innocent bystander who will get very stroppy if you set foot on his fiercely guarded garden. Also wandering around are numerous villagers who can be more useful than at first imagined. With a swish of your stick, you can turn them into a duplicate wizard – guaranteed to confuse opponents no end!

Other spells available are Teleport, Protect, Sprites (which creates a mini-army to fight for you), Fireball, Reduce and Heal. Feud looks great!

Streetdate: late February
Price: £2.99

OCTAGONAL ALIEN CHAMBERS

There are many mysteries in the world, aren't there? Why is the World round? Where do the blackcurrant Fruit Pastilles go? What on Earth is Octon about?

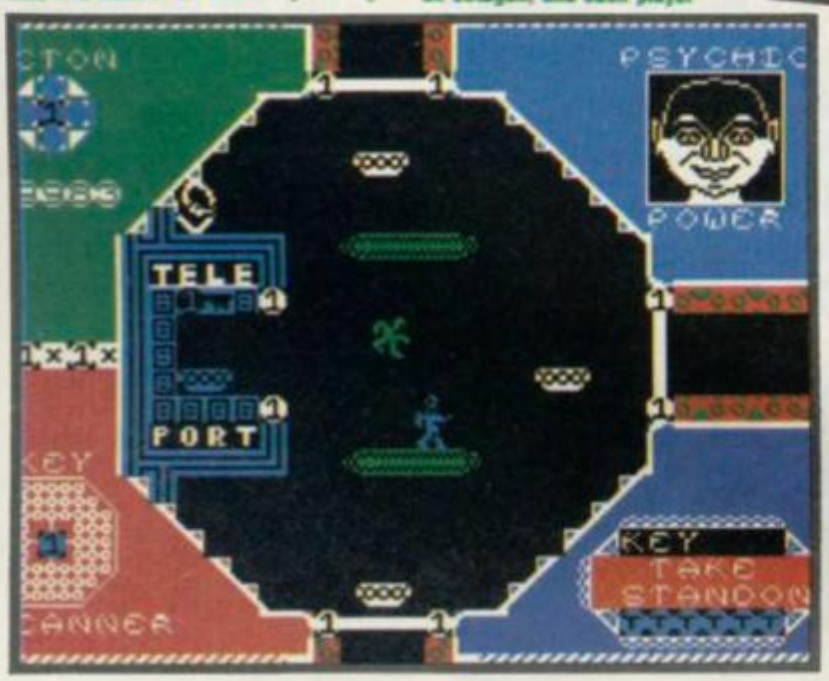
Here at SU, we're thoroughly stumped by all these questions, but we're most interested in the latter, Octon. And a very bizar title it is indeed. We had many hours of enjoyment trying to work out exactly what was going on. It looks a little bit like Trivial Pursuit, in the arrangement of the board. As far as we could gather, the aim of the game is for each player to get as close to the middle as possible.

The screen is in the shape of an octagon, and each player begins on the outer part of the board. Once you have decided to which 'square' you wish to move on your progression towards the centre, that cell will be enlarged through a rather strange graphic process, and the next stage will ensue.

Here, the program pretends to be a very poor arcade game, involving you – with a jetpack – and a couple of aliens, in an octagonal room. You fly around on your pack, collecting little 'T' symbols and putting them on to a teleport pad (hence the T. Conceptual eh?). Once you've collected your quota of Ts – hindered by the aliens – you fly to whichever exit you fancy and hit the teleport switch.

Check out this screen and see if you can understand it.

Streetdate: February.
Price: to be announced



STUNNING SKIMMING

Check out the pics, guys. This is it. After hundreds and hundreds of programs, all claiming to be the best, tastest, slickest and most excellent, we've found the closest thing to all of these adjectives.

Shadow Skimmer from The Edge is absolutely brilliant. Now, everyone knows that whenever anyone says absolutely brilliant it often isn't anything of the sort. Well, not so with this one. Shadow Skimmer is REALLY absolutely brilliant. And it's got the smoothest graphics I've ever seen.

The aim of the thing is to find

PREVIEW

LEVEL 9 KNIGHT ORC

Are these some seriously good graphics, or are these some seriously good graphics? That's because it's the Amiga version of Rainbird's new adventure, Knight Orc, and we all know how much Amiga costs.

Now, before you start saying "Gord. They'll never be that good on the Spectrum", just bear this in mind: it's been programmed by Level 9 using a brand new graphics system, markedly improving the quality of graphics on Spectrum adventures, – which in the past has always been, frankly, awful.

The program is going to be absolutely enormous, coming on three tapes and in a splendid box (with a price to match) and the plot centres around an oppressed orc.

The game is Level 9's first all new release since Price of Magik.

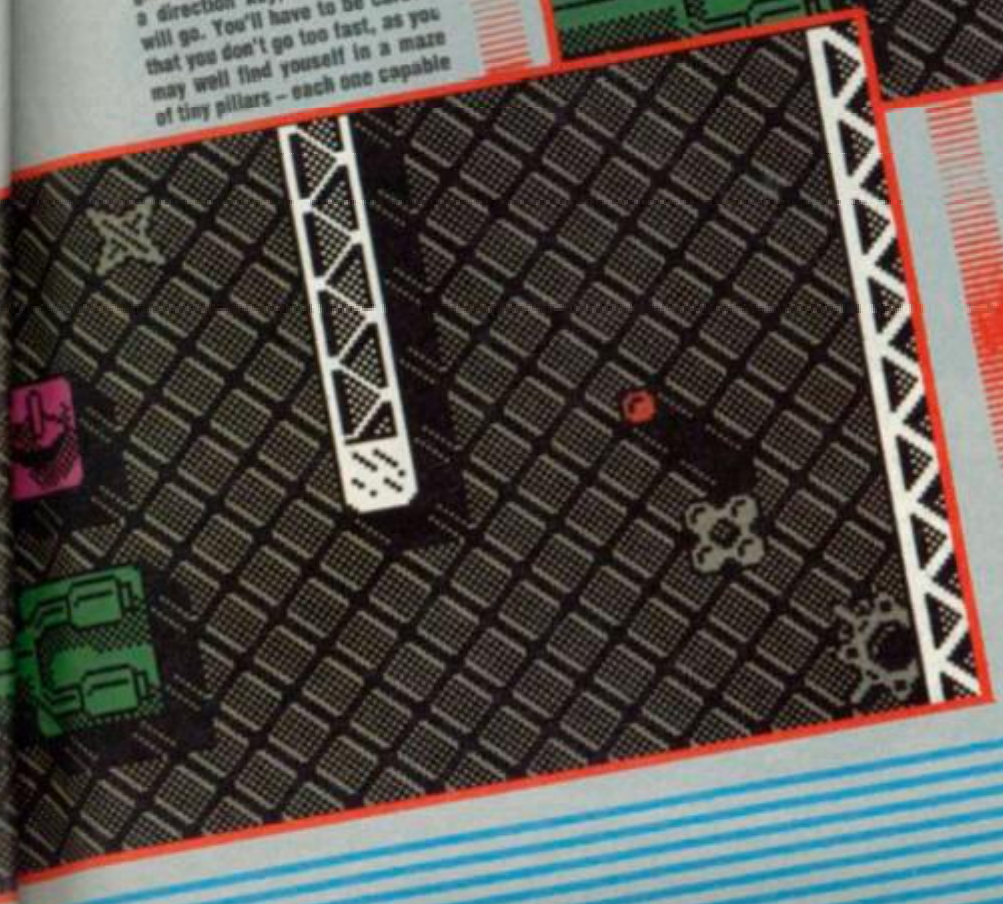
We haven't got a whole lot of info at the moment but are reliably informed by Rainbird that it's completely brilliant, and there are lots of independent characters that you must interact with. More details next month.

Streetdate: late February.
Price: £14.95

your way back into a spacecraft on which you are a maintenance droid. Owing to a malfunction in the ship's computer-controlled security circuits, the defences of the craft are informed that you are a hostile attacker, and must be destroyed, immediately.

And you're stuck on the outside.

Controlling what appears to be a cross-shaped thingumy, you glide across the hull of the ship, ducking under twisty pipes and avoiding ducts and defence-ports. The graphics are just great. The longer you hold down a direction key, the faster you will go. You'll have to be careful that you don't go too fast, as you may well find youself in a maze of tiny pillars – each one capable



other and next to each other. It's as if attribute clash had never been heard of at The Edge.

Dodging the sneaky radar installation and the guards who swarm all over the place, you'll come across a hatch in the floor. Looks useful. And indeed it is. If you locate youself above the hatch, and hit the Fire button, the doors will glide open in a most breathtakingly uncomplicated-and-yet-oh-so-impressive manner, and you'll be drawn down to the next level.

Monoralls for security staff to glide along are also some of the of flinging you back the way you came – or worse still, off at a bizarre tangent and very possibly into another pillar.

Attribute problems no longer exist. Colours glide over each natty features hidden away in the code, just waiting to pop up and impress the socks off you when you stumble upon the correct screens.

Watch out for the laser turrets, too!

As if that wasn't enough, you can flip the skimmer through 180 degrees and fly off in the other direction. Very clever. You've got to use this facility to hit aliens which would otherwise by either above or below you. Very tricky indeed.

If the rest of the game matches up to what we've seen so far Shadow Skimmer will beat the pants off mostly everything else around for ever (OK, so I exaggerated)

Streetdate: February/March.
Price: £7.95

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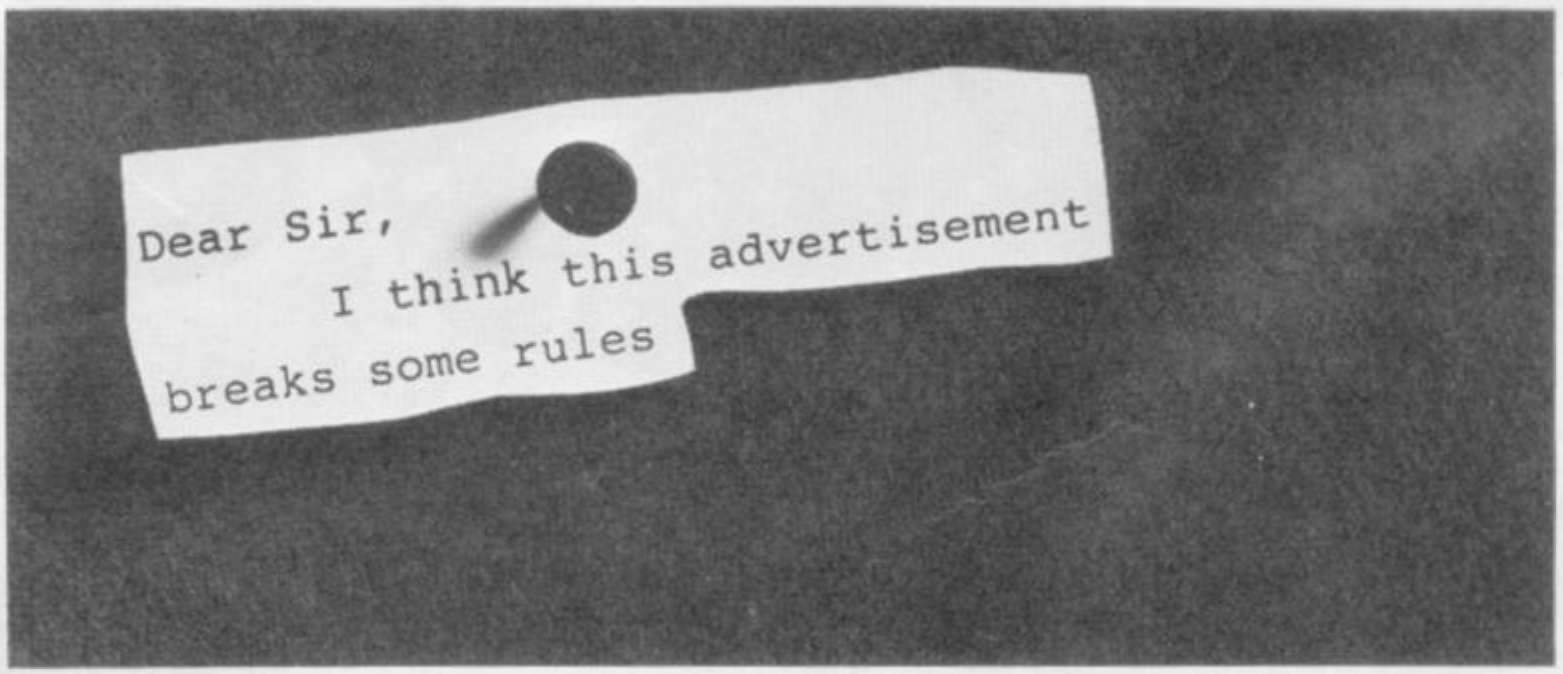

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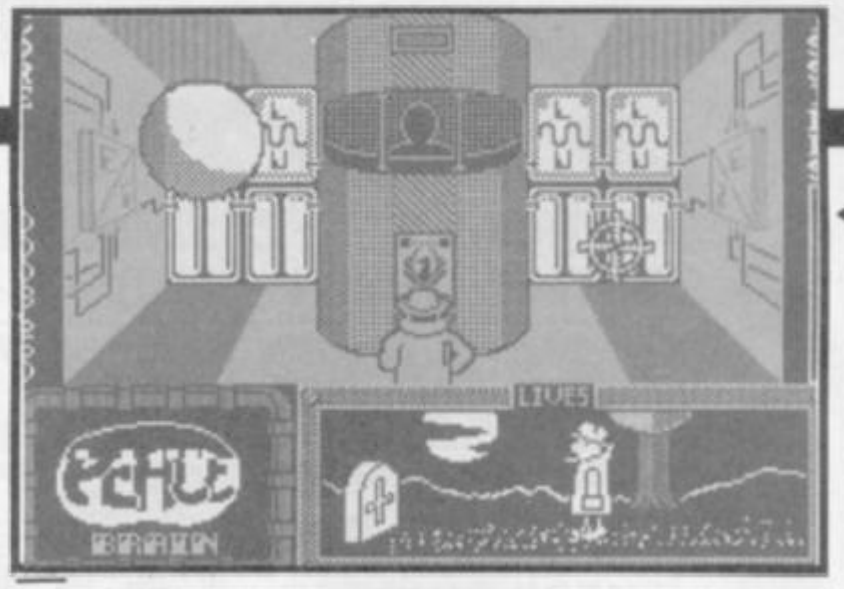


FIREBIRD'S BUDGET GUNNING

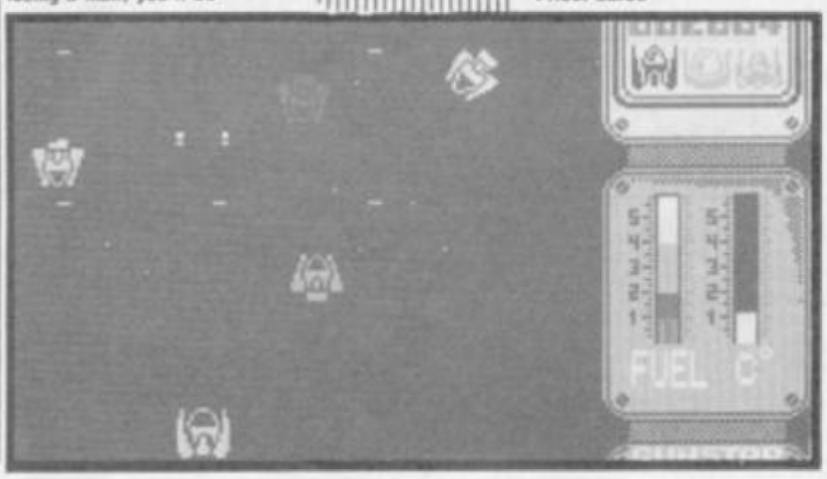
It's nice to know that some values haven't changed in these times of new fangled gizmos and doo-dahs. It's good to know that you can rely on Firebird Software to produce a game that most companies gave up on years ago.

In Gunstar (brilliant title) you pilot a variety of spacecraft through alien defences, blasting and killing and dodging asterious like there's no tomorrow. Things kick off from the top of the screen, and gradually work their way down towards you. After losing a man, you'll be introduced to a new pilot and ship, with different attributes etc. Until. . . you reach the alien mothership!

Then you have to blast away about a hundred shots and the ship will explode and everything will be great with the world again.

Sounds quite bad, but in fact it's rather nice. You get to zoom around with a nice amount of speed, blowing away brightly coloured aliens from start to finish.

Streetdate: late February.
Price: £2.99



MULTI-LOAD ESPIONAGE

Stop press!. . . Urgent news from Washington. . . President kidnapped by mad professor. . . Rumours that Agent X has been called in. . .

Agent X new from Mastertronic is an odd little game. Taking the title role, you venture into enemy land, find and rescue the President of the United States and get him out alive! Why bother?

The program seems to be following an alarming trend for the people with iffy cassette recorders – multi-loads. The first part is a semi-3D driving game in which you must drive Agent X's car along a busy highway, *en route* to the bad-guy's hideout.

The rest of the game features very familiar-looking runny jumpy screens where you have to get past the professor's guards and booby-traps.

You'll also find a rifle with which you can plug some of your more dangerous assailants.

Described as a multi-load mega action, it might actually be quite good.

Streetdate: end February.
Price: £2.99

★★★★ 3D COSMIC SHOCKS ★★★★

Life as a fourth rate super-hero can be pretty dull. You end up sitting in your air-conditioned office all day, just waiting for the phone to ring. And even when a case does come along, it's always very sleazy indeed.

By the time they've been turned down by *Superman* and *Spiderman* all the good cases have been taken. It's only on the very rare occasion when you get a real case. . .

Earth has been invaded by big green monsters. They're eating listed buildings! They're rampaging in the streets! They're avoiding paying their fares on public transport! They've got to be stopped!

The President sits at his desk, a blue phone in front of him. He's been awake for 48 hours. Tired, unshaven, near to despair, he picks up the phone and dials the number of the only person capable of taking on the task of ridding the planet of these beasts – Cosmic Shock Absorber.

In the latest game from Martech, you find yourself in the role of CSA, set down on an Earth over-run by mad monsters. Armed only with a handgun, you must blow away everything that looks remotely like an alien – look out for eyes on boggley stalks.

Everything is 3D. All you have to do is blast things. You're equipped with some shields. Once they've gone – you've had it!

Can Cosmo save the world from destruction? Will the 3D graphics look as good as this when they move about? When will a finished version appear? Only time – as they say – will tell.

Streetdate: late January.
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NORMAN THE CAT?!

Greyfell is the first product to trundle off the Starlight Software production line, and it looks pretty flippin' impressive.

In Greyfell, you assume the character of Norman the Cat. Norman has no particular aim in life. Indeed, he seems to make a definite effort to avoid any tasks which do not involve consuming an alarming amount of alcohol.

If you've looked at the screenshot only to think that it's an identical game to all of the Alien 8 alike Ultimate titles, you'd be very wrong indeed. Greyfell involves many puzzles of a decidely intricate nature as well as the familiar 3D graphics. Mapping will feature, of course, but there are so many other elements that promise to make Greyfell a real cracker.

Everything is controlled by icons (except movement) and you can manipulate objects in a very satisfactory manner. There are also real buildings. Instead of coming across a hut which was apparently useless, you can go in through the door, and you'll find a new set of locations.

And there are lots of characters who will give you cryptic clues and tasks to complete before you can pass them.

In fact it looks pretty good.
Streetdate: February
Price: £9.95

ANOTHER 128K AEROSOL

This is some aerosol emulator! Don't mind me, viewers, I'll just sit here for a while playing with Icon Grafix 128 from Audiogenic and it's dead impressive.

Attempting to do similar things as the 48K version, though even better, the system boasts the following crazee features:

- Everything is icon-driven
- *Fill* now has 34 textures
- You can *Zoom* in and edit pixels
- You can *Flip* images
- Text can be typed on to screen
- Take cuttings of any screen area and keep them
- Print out your picture after. . .
- Colour it

Well you can spray me pink and inverse my underwear if it doesn't sound exactly the same as all the other art utilities around at the moment.

Check out this demo screen and draw (haha) your own conclusions.

Streetdate: late January.
Price: £12.95

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PLEASE TURN TO PAGE 97 FOR THE CLASSIFIED COUPON

I·N·D·I·N 8·6

The Industry Dinner
Hilton Ballroom
17th December 1986

Winner of the **Gremlin** award for the cheapest attempt at photo montage ever seen is this picture from the East End boys themselves CRL.

The picture to advertise **Ball Breaker** depicts the destruction of the ridiculous CRL house and can be seen as a conflict between managing directors Clement Chambers' Id and Ego. Guess what, the Ego wins. You can actually see where the ball and chain has been cut out and stuck on to a perfectly ordinary picture of a very unattractive building

And so the Indin. The Indin is the industry event of the year. It is a time where the entire menagery of software houses computer magazine publishers and software distributors get together and pay a lot of money for tables in a big hall in the Hilton Hotel.

It's a time of unity and pulling together. It was pretty depressing.

Highlight of the evening is the raising of cash for charity, this year the NSPCC. Various semi-useless items are sold off for astonishing sums of money. In principle this is good. There is a simple Geldoffian argument that here we have assorted industry people all raking in cash (enough at least to have been able to afford the £1,000 per 10-seat table for the event) and they should damn well put up money for charity.

Bob Geldoff for the night was Anne Brown who is (to simplify things a bit) US Gold. On stage she haranged and bullied companies into putting up ever more cash. "These are kids we're talking about" she insisted "Don't you care?". Here's that argument: Kids need the cash, the industry has it to spare, therefore they should put it up. Therefore they should be haranged ar d cojoled by whatever means necessary to make them put it up. Right?

Nick Alexander didn't think so, the head honcho of Virgin games found himself haranged "put up £500, Nick, you can afford it" – you get the picture. He wouldn't. His argument (translated from the colloquial) "this is a naff way of doing things, you're alienating people, I'm leaving". He did. He was applauded fairly loudly. Anne Brown said "Good" petulantly. And a good deal more money was raised for further items after Anne Brown stepped down from the stage because people actually got a chance to give money voluntarily.

At the drunken disco after the event not a few people claimed (true or not) that they weren't about to be haranged by 'that women' and that they would make their own arrangements to give to the charities they wished. *Gremlin* thinks that the Geldoffian argument has some terrible flaws in it, if only because some people react badly to being told what they should do and deliberately won't do it.

Gremlin predicts that the Indin will be less well supported next year and there will be a very strong backlash against the whole thing.

A lot of money was raised this year – over £16,000. This is good for the kids.

But, next year will probably be a disasterous flop. ****

★★★★★★★

Much madness at the annual EMAP staff fayre. A charming event held at the London Dungeon for the benefit of staff (based on ideas in Von Neuman's Interactive Staff Management and Goal Objective-based Controlled Workforce Freetime Jolity Book Number 7).

▲More than the Mad Celt can handle?

The general theme of monsters and horror was maintained by the SU team who all dressed as nightmaris creatures. David (The Ronettes Kelly came as Edwina Curry, *Jim Douglas* came as 'Sean Penn just after he's had his picture taken' The Mad Clet

Jim Douglas: refreshing the parts. . .

came as 'a hangover'. Graham Taylor dressed up as The Rev Ian Paisley. And John Gilbert refused to tell us what he had come as because it was too horrible. Apparently John Carpenter is doing the movie!

Hunter S Minson's ramblings have entertained/irritated/bored (tick one) us all and show us a life in the fast lane, close to the edge, I'm young and free and I wanna break free, post Iggy Pop (Ouch! this glass hurts) style.

Hunter S Minson models himself closely on Hunter S . Thompson a drug-crazed journalist whose articles were nearly all about scoring drugs in far flung corners of the world. Cor Baby, that's really free.

Anyway Hunter S, who is actually a decent, if marginally psycotic fellow has decided to hang up his coke spoon, sell all his *Velvet Underground* albums and, gasp, get married.

Congrats all round. So remember this, next time you read any of his stuff about life at the computer world's cutting edge it was probably written in a cottage with roses around the door by a blazing fire in a comfy chair with pipe and slippers.

See you for cigars and port sometime M.

▲ Minson: pipe and slippers

▲ Pop: ouch!

Gremlin's mega-winge about the state of TV coverage of micro stuff a couple of issue back seems to have struck the odd chord.

One extremely intelligent letter from Mark Pullin suggested quite a number of things including scrapping *Micro Live* (dead), creating a new program where people use computers other than the BBC (you radical Mark), bringing in presenter who know something about computers (gasp), using all the popular micros for hardware and software reviews, not going to America (where does Freff come from?), and visiting software houses to look at how a game is created.

Of course none of this stuff will happen and the next series of *Micro Live* will be more boring things about computers on the stock exchange, shopping using your TV set and running Logo on the BBC.

If it is, why don't all of you out there write to the BBC (BBC, TV Centre, Wood Lane, Shepherds Bush, London) and complain. Perhaps some of the letters will be read out in a smug little jaunty voice by whoever replaces Barry Took

As a good many computer magazines spent 1986 ripping off ideas from *Smash Hits*, *Gremlin* was wondering if this year we could all start stealing from *The Face*

Gremlin

What with leaders of software houses having naff New Year's resolutions like 'to go from number three software houses in the Universe to number one' (thanks Steve), Gremlin thought it was time that the truth was told and decided to write New Year's resolutions on behalf of various computer industry companies:

● Ocean and US Gold: We promise not to release any more naff games on the back of terrible licencing deals based on dreadful films. We admit that **World Cup Carnival** was a complete cock-up and we are very sorry.

● Elite: We will try and invent some original games instead of doing sometimes medicore conversions of arcade machines

● Firebird: We will finally realise that Mastertronic has upped the stakes on what people can expect for £1.99 and they will not take any old crud we happened to have kicking around the offices

● Domark: Having released a decent game (Trivial Pursuit) we have realised the error of our ways and will never do another **Friday the 13th** so long as we live

● Amstrad: Well you got us bang to rights gov'ner we done wrong wiv de pins in der Plus 2 and irritated a lot of loverly punters. We will make up for it by puttin art Loki for a hundred quid. Gawd luv yer!

● Bruce Everiss promises not to take any further part in the home computer industry and is currently retraining as a social worker in Brent specialising in devient sexual groups

Virgin's Laughing Shark symbol of Nick Alexander attempts to leave the industry dinner as exemplified by a small terraced house in Oxford. . . which is for sale. (Good grief, this is the most convoluted caption I've ever had the misfortune to write)

CAPTION COMP No 4

Last month's caption competition drew a surprisingly good response given the fact that most of them had to be thought up over the Christmas Hols. Surprisingly few of the entries were sexist which shocked *Gremlin* deeply but was welcomed by the politically sound Kelly. Of the entries that reached us notable were "Merry Christmas, Clive. Here's some hair restorer. It worked for me" – a baldness joke from Tony Byrne of Romford, Essex and "I hope Amstrad don't know that I've bought your name too" (if you're confused, as Gremlin was, try stressing the 'I've' to get the joke) from Graham Crosthwaite of Edinburgh.

The winner however is "Pawn!? No, my dear, I tried obscenities with the CS!!..." That from Sebastian Blevings of Gloucester Road, New Barnet. Congrats. The usual money will be actioned vis a vis our accounts office before the millenium...

Anyway, Gremlin thinks it's time we had an easy one for novice caption writers. Behold a man who seems to either be showing or selling a Spectrum Plus to a rather disinterested robot. What is he saying or the robot thinking or both? Answers to reach us by January 30. Send your offering to Gremlin Caption Compo No4, Sinclair User, Priory Court, 30/32 Farringdon Lane, London EC1R 3AU.

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Caption (max 12 words).....

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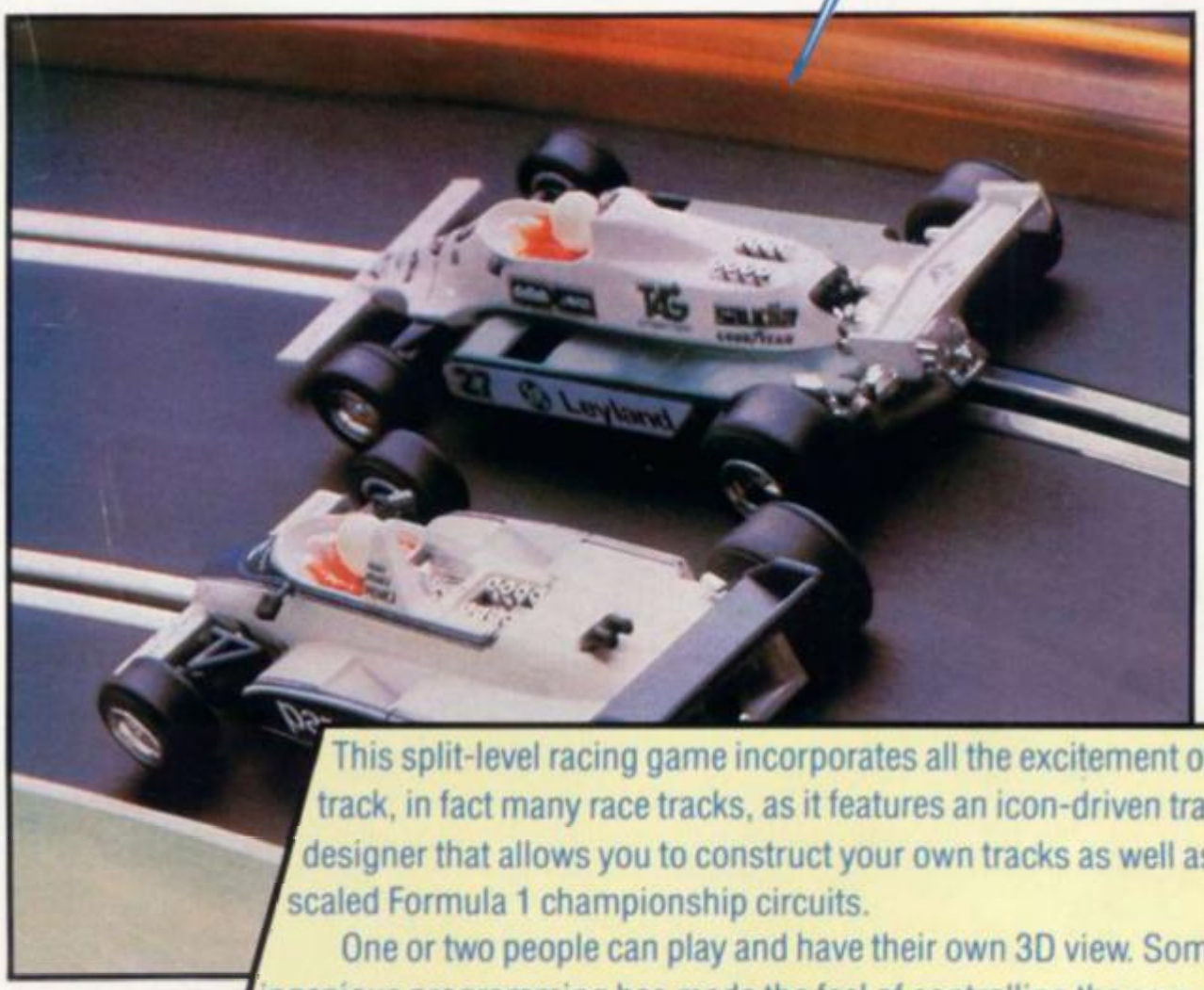

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